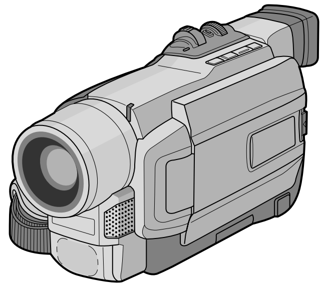
JVC

SERVICE MANUAL

DIGITAL VIDEO CAMERA

GR-DVL512U



Mini DV NTSC

DSC DIGITAL STILL CAMERA

Regarding service information other than these sections, refer to the GR-DVL510U service manual (No. 86601). Also, be sure to note important safety precautions provided in the service manual.

SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-DVL512U)*

Camcorder

For General

Power supply	: DC 11.0 V ⎓ (Using AC Adapter) DC 7.2 V ⎓ (Using battery pack)
Power consumption	
LCD monitor off, viewfinder on	: Approx. 4.3 W
LCD monitor on, viewfinder off	: Approx. 5.3 W
Video light	: Approx. 3.5 W
Dimensions (W x H x D)	: 83 mm x 97 mm x 188 mm (3-5/16" x 3-7/8" x 7-7/16") (with the LCD monitor closed and the viewfinder pushed down)
Weight	: Approx. 590 g (1.3 lbs)
Operating temperature	: 0°C to 40°C (32°F to 104°F)
Operating humidity	: 35% to 80%
Storage temperature	: –20°C to 50°C (–4°F to 122°F)
Pickup	: 1/4" CCD
Lens	: F 1.8, f = 3.6 mm to 36 mm, 10:1 power zoom lens
Filter diameter	: ø37 mm
LCD monitor	: 2.5" diagonally measured, LCD panel/TFT active matrix system
Viewfinder	: Electronic viewfinder with 0.24" black/white LCD
Speaker	: Monaural

For Digital Video Camera

Format	: DV format (SD mode)
Signal format	: NTSC standard
Recording/Playback format	: Video: Digital component recording : Audio: PCM digital recording, 32 kHz 4-channel (12-bit), 48 kHz 2-channel (16-bit)
Cassette	: Mini DV cassette
Tape speed	: SP: 18.8 mm/s LP: 12.5 mm/s
Maximum recording time (using 80 min. cassette)	: SP: 80 min. LP: 120 min.

For Digital Still Camera

Storage media	: SD Memory Card/MultiMediaCard
Compression system	: JPEG (compatible)
File size	: VGA (640 x 480 pixels)
Picture quality	: 2 modes (FINE/STANDARD)
Approximate number of storable images	
with memory card [8 MB] (provided)	
FINE	: 100
STANDARD	: 200
with memory card [16 MB] (optional)	
FINE	: 200
STANDARD	: 400
with memory card [32 MB] (optional)	
FINE	: 400
STANDARD	: 800
with memory card [64 MB] (optional)	
FINE	: 800
STANDARD	: 1600

For Connectors

S-Video	: Y : 1 V (p-p), 75 Ω, analog C : 0.29 V (p-p), 75 Ω, analog
AV	
Video output	: 1 V (p-p), 75 Ω, analog
Audio output	: 300 mV (rms), 1 kΩ, analog, stereo
DV	
Output/input	: 4-pin, IEEE 1394 compliant
USB	: 5-pin
EDIT	: ø3.5 mm, 2-pole

AC Adapter AP-V10U

Power requirement	
U.S.A. and Canada	: AC 120 V∿, 60 Hz
Other countries	: AC 110 V to 240 V∿, 50 Hz/60 Hz
Output	: DC 11 V ⎓ , 1 A
Dimensions (W x H x D)	: 59 mm x 31 mm x 84 mm (2-3/8" x 1-1/4" x 3-5/16")
Weight	: Approx. 130 g (0.29 lbs.)

Specifications shown are for SP mode unless otherwise indicated. E & O.E. Design and specifications subject to change without notice.

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No. 86627
April 2001

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The following table indicate main different points between models GR-DVL510U and GR-DVL512U.

MODEL ITEM	GR-DVL510U	GR-DVL512U
REMOTE CONTROL UNIT	RM-V715U	RM-V716U

The following table indicate different parts number between models GR-DVL510U and GR-DVL512U.

PACKING AND ACCESSORY ASSEMBLY <M1> Note: As for IB (INSTRUCTIONS), refer to sec.5.

⚠	REF. NO.	MODEL ITEM	GR-DVL510U	GR-DVL512U
	11	CD ROM	*LY32210-003ALY32210-009A	
	17	REMOTE CONTROL UNIT	*LY42129-001ALY20543-002A	
	21	USB CABLE	*QAM0324-001QAM0352-001	
	23	CABLE ASSY	—	PEAC0428-150
	24	CORE FILTER	—	QQR0491-002

FINAL ASSEMBLY <M2>

⚠	REF. NO.	MODEL ITEM	GR-DVL510U	GR-DVL512U
	101	LOWER CASE ASSY	*LY20706-003BLY20706-003C	
	101C	COVER(JACK)	*LY32099-001BLY32099-001C	
	102	ARM ASSY	*LY20697-001ALY20697-001B	
	104	CASSETTE COVER ASSY	*LY20704-001ALY20704-001B	
	107	COVER(AJUST)	LY32092-010ALY32092-032A	
	143	SPECIAL SCREW	*LY30018-084A,(X2)	LY30018-084A,(X1)
	146	SPECIAL SCREW	*LY30018-084A,(X2)	LY30018-084A,(X3)
	151	SPECIAL SCREW	*—	LY30018-023A
	158	SPECIAL SCREW	*LY30018-090ALY30018-0D6A	

MONITOR ASSEMBLY <M5>

⚠	REF. NO.	MODEL ITEM	GR-DVL510U	GR-DVL512U
⚠	500	MONITOR ASSY	LYH20246-010A	LYH20246-018A
	510	SPACER(A)	*LY30029-063A	—

Notes: Mark — is not used.
Mark * reference model was also changed.

MAIN BOARD ASSEMBLY <01>

⚠ REF. NO.	MODEL ITEM	GR-DVL510U	GR-DVL512U
PW	MAIN BOARD ASSY	*YB10317B-03	YB10317B-04
IC1401	IC	*YQ44881A	YQ44882A
IC1403	IC	*SN74AHC2G53T	—
R1410	MG RESISTOR	*NRSA6AJ-331W	—
R1411	MG RESISTOR	*NRSA6AJ-473W	—
R1412	MG RESISTOR	*NRSA6AJ-331W	—
R1413	MG RESISTOR	*—	NRSA6AJ-331W
R6014	MG RESISTOR	*—	NRSA63J-0R0X
R8013	MG RESISTOR	*NRSA6AJ-821W	—
C1008	CAPACITOR	*NCBA1CK-103W	—
C1013	CAPACITOR	*NCBA1CK-103W	—
C1018	CAPACITOR	*NCBA1CK-103W	—
C1024	CAPACITOR	*NDCA1HJ-100W	—
C1025	CAPACITOR	*NDCA1HJ-100W	—
C8030	CAPACITOR	*NDCA1HJ-150W	—
X1001	C OSCILLATOR	*NAX0424-001X	NAX0474-001X
S6001	SLIDE SWITCH	*NSW0096-001X	—

MONITOR BOARD ASSEMBLY <02>

⚠ REF. NO.	MODEL ITEM	GR-DVL510U	GR-DVL512U
PW1	MONITOR BOARD ASSY	*YB10324H1-03	YB10326H-01
C7616	CAPACITOR	*NCB31HK-102X	NCB31EK-103X
C7640	CAPACITOR	*—	NCB31EK-103X
CN766	SD CARD CONNECTOR	*NNZ0052-001X	NNZ0058-001X

LCD BL BOARD ASSEMBLY <03>

⚠ REF. NO.	MODEL ITEM	GR-DVL510U	GR-DVL512U
PW2	LCD BL BOARD ASSY	*YB10324B2-02	YB10325B

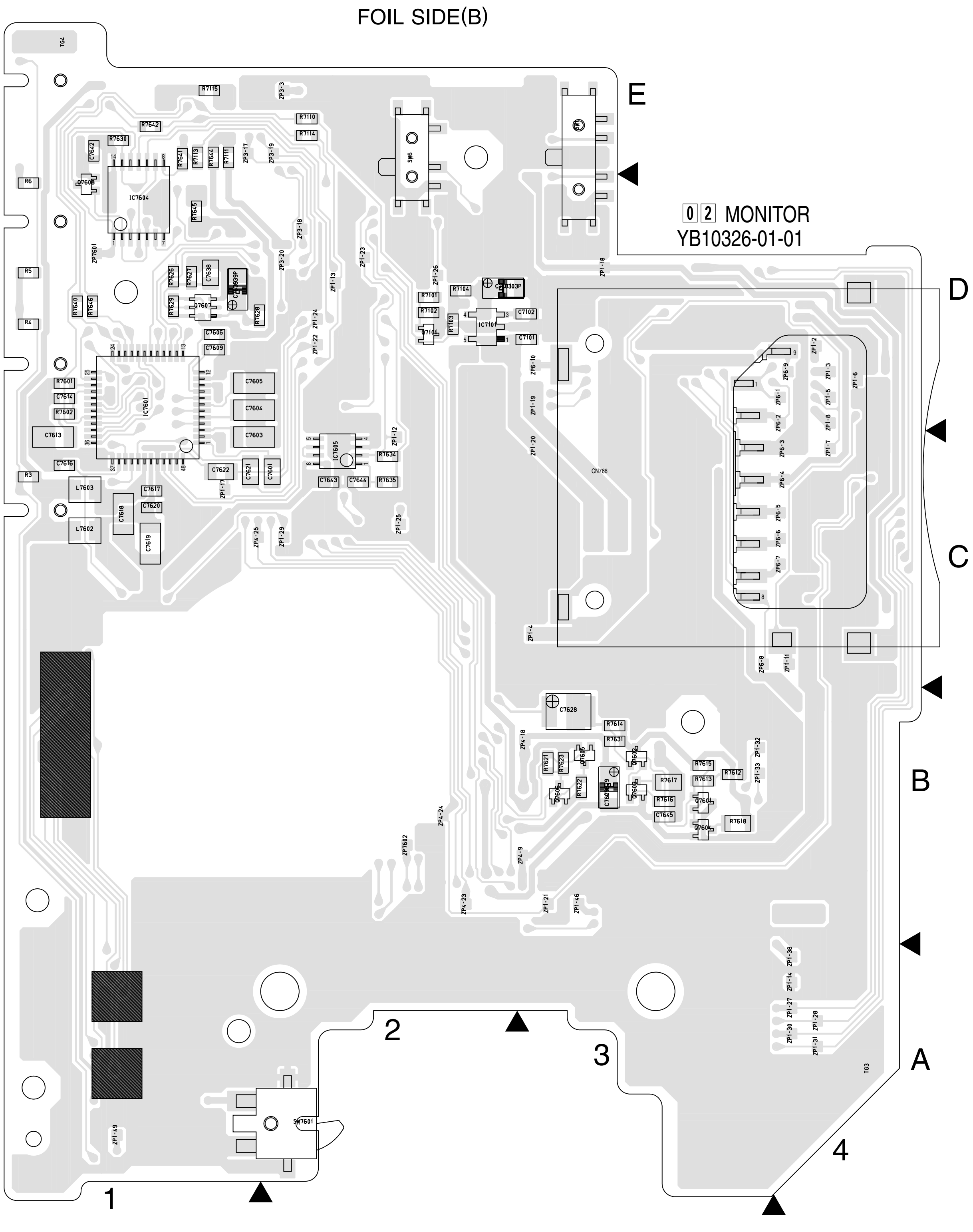
JACK BOARD ASSEMBLY <06>

⚠ REF. NO.	MODEL ITEM	GR-DVL510U	GR-DVL512U
PW1	JACK BOARD ASSY	*YB10314B1-01	YB10314B1-03
HD1	HOLDER(J.PWB)	*LY32086-001ALY32086-001B	

Notes: Mark — is not used.
Mark * reference model was also changed.

SECTION 4
CHARTS AND DIAGRAM

4.1 MONITOR CIRCUIT BOARD



COMPONENT PARTS LOCATION GUIDE ＜MONITOR＞

REF.NO.	LOCATION		
CAPACITOR			
C1	A	C	1C
C10	A	C	3D
C11	A	C	3D
C7101	B	C	2D
C7102	B	C	2D
C7103	B	C	2D
C7601	B	C	1C
C7602	A	C	1C
C7603	B	C	1C
C7604	B	C	1D
C7605	B	C	1D
C7606	B	C	1D
C7607	A	C	1D
C7608	A	C	1D
C7609	B	C	1D
C7610	A	C	1D
C7611	A	C	1D
C7612	A	C	1D
C7613	B	C	1C
C7614	B	C	1D
C7615	A	C	1D
C7616	B	C	1C
C7617	B	C	1C
C7618	B	C	1C
C7619	B	C	1C
C7620	B	C	1C
C7621	B	C	1C
C7622	B	C	1C
C7623	A	C	2D
C7624	A	C	2D
C7625	A	C	2D
C7626	A	C	2D
C7627	A	C	2C
C7628	B	C	3B
C7629	B	C	3B
C7630	A	C	3B
C7631	A	C	3B
C7632	A	C	3B
C7633	A	C	3B
C7634	A	C	3B
C7635	A	C	3B
C7636	A	C	2B
C7637	A	C	3B
C7638	B	C	1D
C7639	B	C	1D
C7640	A	C	1B
C7641	A	C	1A
C7642	B	C	1E
C7643	B	C	2C
C7644	B	C	2C
C7645	B	C	3B
CONNECTOR			
CN761	A	C	4D
CN763	A	C	1E
CN764	A	C	3B
CN765	A	C	1C
CN766	B	C	4C
DIODE			
D1	A	C	1A
D10	A	C	3D
D7601	A	C	3B
IC			
IC7101	B	C	2D
IC7601	B	C	1D
IC7602	A	C	2C
IC7603	A	C	1B
IC7604	B	C	1D
IC7605	B	C	2C
COIL			
L10	A	C	4D
L7601	A	C	2D
L7602	B	C	1C
L7603	B	C	1C
L7604	A	C	3B
L7605	A	C	3B
L7606	A	C	3B
L7607	A	C	3B
TRANSISTOR			
Q10	A	C	3D
Q7101	B	C	2D
Q7601	B	C	3B
Q7602	B	C	3B
Q7603	B	C	3B
Q7604	B	C	3B
Q7605	B	C	3B
Q7606	B	C	3B
Q7607	B	C	1D
Q7608	B	C	1D
Q7609	A	C	2B
Q7610	A	C	2B
RESISTOR			
R1	A	C	3E
R2	A	C	3E
R3	B	C	1C
R4	B	C	1D
R5	B	C	1D
R6	B	C	1D
R10	A	C	3D
R11	A	C	4D
R12	A	C	4D
R13	A	C	3D
R14	A	C	4D
R15	A	C	3D
R16	A	C	3D
R17	A	C	3D
R18	A	C	4D
R19	A	C	3D
R20	A	C	3D
R21	A	C	3D
R22	A	C	3D
R23	A	C	4D
R24	A	C	3D
R25	A	C	3D
R26	A	C	3D
R27	A	C	3D
R28	A	C	3D
R71			
R71			
R71			
R71			
R71			
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R76			
R76			
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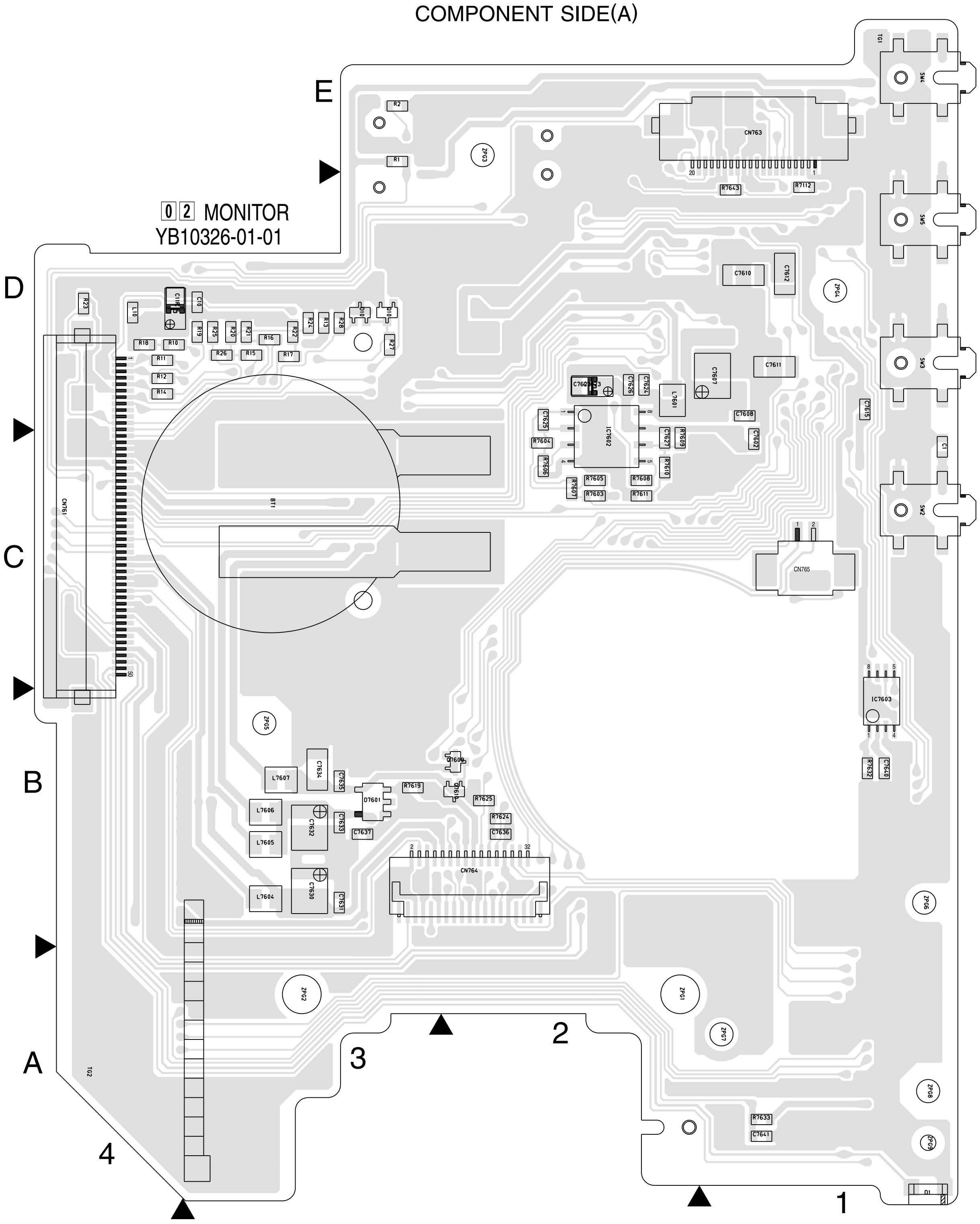
R76			
R76			

COMPONENT SIDE(A)



02 MONITOR
YB10326-01-01
E
D
C
B
A
1
2
3
4
CN761
CN763
CN764
CN765
BT1
IC7602
IC7603
D7601
L7601
L7604
L7605
L7606
L7607
C7607
C7610
C7611
C7612
C7630
C7632
C7634
R7603
R7604
R7605
R7608
R7611
R7619
R7625
R7633
R7643
R7112
C7641
SW2
SW3
SW4
SW5
ZPG1
ZPG2
ZPG3
ZPG4
ZPG5
ZPG6
ZPG7
ZPG8
ZPG9
TG1
TG2
D1
C1

.NO.	LOCATION			REF.NO.	LOCATION			REF.NO.	LOCATION			REF.NO.	LOCATION			REF.NO.	LOCATION			REF.NO.	LOCATION			REF.NO.	LOCATION			REF.NO.	LOCATION			REF.NO.	LOCATION		
01	B	C	2D	R7606	A	C	2C	R7622	B	C	3B	R7641	B	C	1E	SW3	A	C	1D	ZP3-3	B	C	2E	ZP1-17	B	C	1C	ZP1-32	B	C	3B	ZP7602	B	C	2B
02	B	C	2D	R7607	A	C	2C	R7623	B	C	3B	R7642	B	C	1E	SW4	A	C	1E	ZP4-9	B	C	2B	ZP1-18	B	C	3D	ZP1-33	B	C	3B	ZPG1	A	D	2A
03	B	C	2D	R7608	A	C	2C	R7624	A	C	2B	R7643	A	C	1D	SW5	A	C	1D	ZP6-1	B	C	3D	ZP1-19	B	C	3D	ZP1-38	B	C	4A	ZPG2	A	D	3A
04	B	C	2D	R7609	A	C	2C	R7625	A	C	2B	R7644	B	C	1E	SW6	B	C	2E	ZP6-2	B	C	3C	ZP1-20	B	C	3C	ZP1-46	B	C	3B	ZPG3	A	D	2E
10	B	C	2E	R7610	A	C	2C	R7626	B	C	1D	R7645	B	C	1D	SW7601	B	C	2A	ZP6-3	B	C	3C	ZP1-21	B	C	3B	ZP1-49	B	C	1A	ZPG4	A	D	1D
11	B	C	1E	R7611	A	C	2C	R7627	B	C	1D	R7646	B	C	1D	TM1	A	C	4A	ZP6-4	B	C	3C	ZP1-22	B	C	2D	ZP3-17	B	C	1E	ZPG5	A	D	3B
12	A	C	1D	R7612	B	C	3B	R7628	B	C	1D	**OTHER**				TM03	A	C	4E	ZP6-5	B	C	3C	ZP1-23	B	C	2D	ZP3-18	B	C	2D	ZPG6	A	D	1B
13	B	C	1E	R7613	B	C	3B	R7629	B	C	1D	BT1	A	C	3C	TM3	A	C	4E	ZP6-6	B	C	3C	ZP1-24	B	C	2D	ZP3-19	B	C	1E	ZPG7	A	D	1A
14	B	C	2E	R7614	B	C	3B	R7630	B	C	1E	C11P	A	C	3D	ZP1-2	B	C	4D	ZP6-7	B	C	3C	ZP1-25	B	C	2C	ZP3-20	B	C	2D	ZPG8	A	D	1A
15	B	C	1E	R7615	B	C	3B	R7631	B	C	3B	C7103P	B	C	2D	ZP1-3	B	C	4D	ZP6-8	B	C	3C	ZP1-26	B	C	2D	ZP4-18	B	C	2B	ZPG9	A	D	1A
01	B	C	1D	R7616	B	C	3B	R7632	A	C	1B	C7623P	A	C	2D	ZP1-4	B	C	3C	ZP6-9	B	C	3D	ZP1-27	B	C	4A	ZP4-23	B	C	2B				
02	B	C	1D	R7617	B	C	3B	R7633	A	C	1A	C7629P	B	C	3B	ZP1-5	B	C	4D	ZP1-11	B	C	4C	ZP1-28	B	C	4A	ZP4-24	B	C	2B				
03	A	C	2C	R7618	B	C	3B	R7634	B	C	2C	C7639P	B	C	1D	ZP1-6	B	C	4D	ZP1-12	B	C	2C	ZP1-29	B	C	2C	ZP4-25	B	C	1C				
04	A	C	2C	R7619	A	C	3B	R7635	B	C	2C	SW1	B	C	3E	ZP1-7	B	C	4C	ZP1-13	B	C	2D	ZP1-30	B	C	4A	ZP6-10	B	C	3D				
05	A	C	2C	R7621	B	C	3B	R7640	B	C	1D	SW2	A	C	1C	ZP1-8	B	C	4C	ZP1-14	B	C	4A	ZP1-31	B	C	4A	ZP7601	B	C	1D				

4.2 LCD BL CIRCUIT BOARD

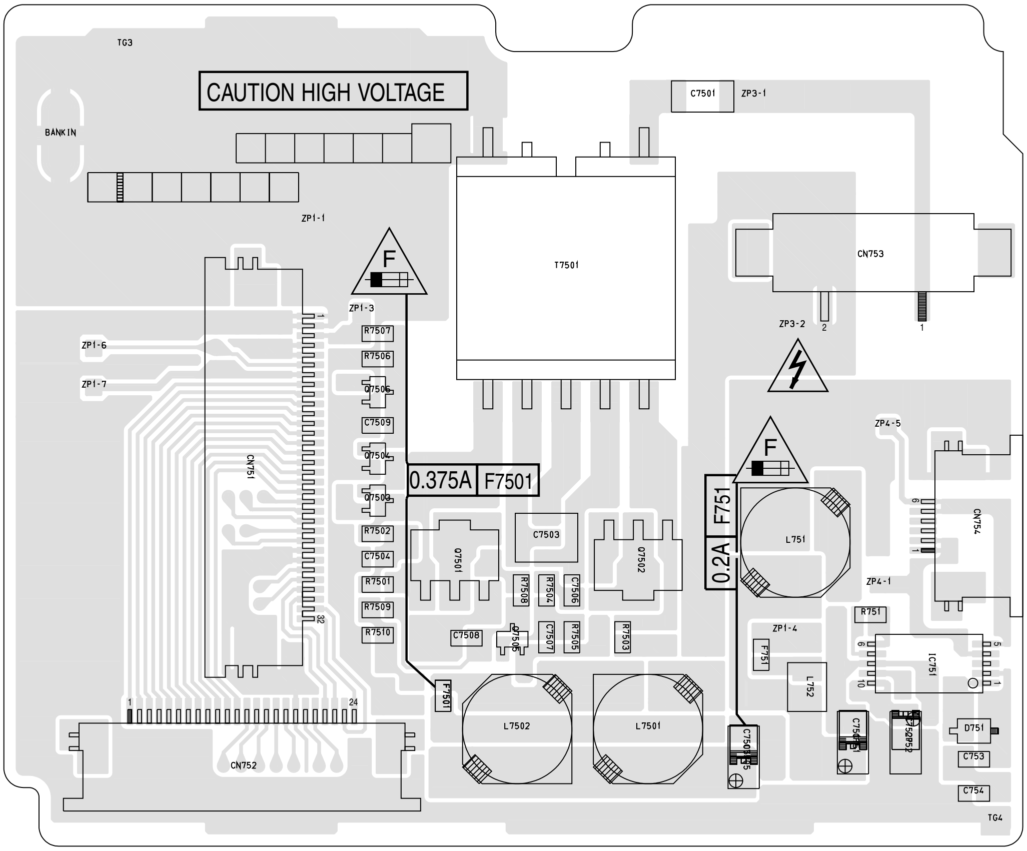
F

• CAUTION:
FOR CONTINUED PROTECTION AGAINST
FIRE HAZARD ,REPLACE ONLY WITH SAME
TYPE AND RATED FUSE(S).

• ATTENTION:
POUR UNE PROTECTION PERMANENTE
CONTRE LES RISQUE D'INCENDE,
REMPLACER LES FUSIBLES PAR UN AUTRE
DE MEME TYPE ET DE MEME TENSION.

03 LCD BL
YB10325

FOIL SIDE(B)


TG3
CAUTION HIGH VOLTAGE
BANKIN
ZP1-1
C7501
ZP3-1
T7501
CN753
F
ZP1-3
R7507
R7506
Q7506
C7509
Q7504
Q7503
R7502
C7504
R7501
R7509
R7510
CN751
ZP1-6
ZP1-7
1
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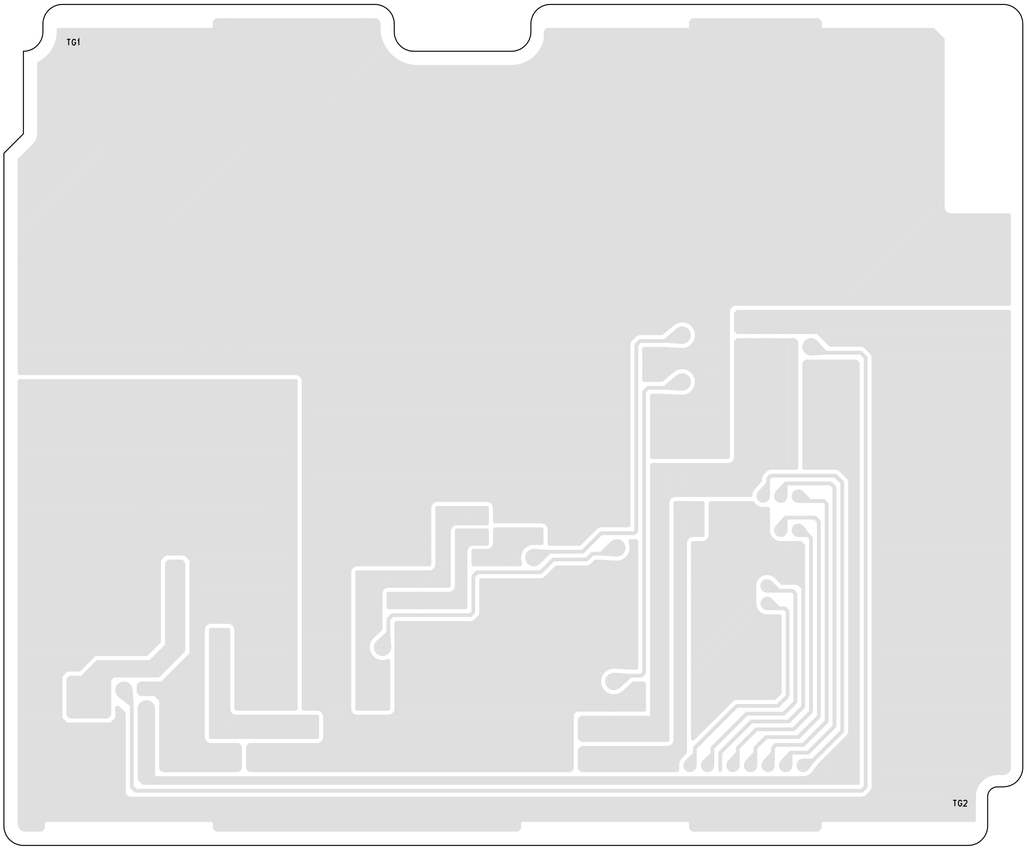
F7501
C7503
Q7501
Q7502
R7508
R7504
C7506
C7508
C7507
R7505
R7503
ZP3-2
2
1
ZP4-5
CN754
F
F751
0.2A
L751
ZP4-1
R751
ZP1-4
F751
L752
IC751
D751
C753
C754
F7501
L7502
L7501
24
CN752
TG4

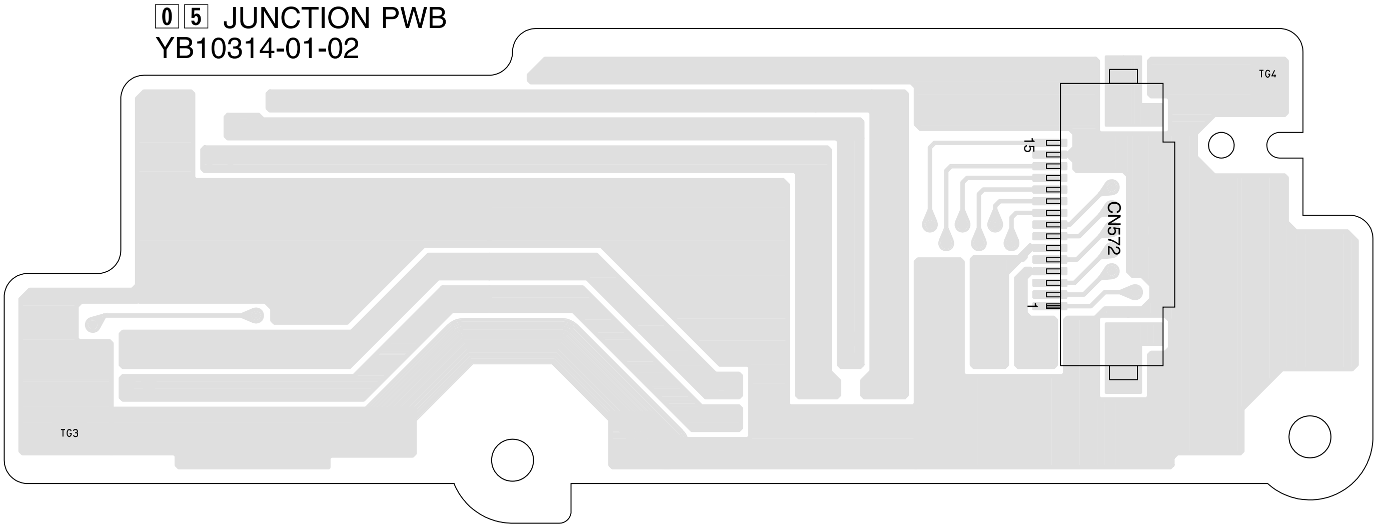
COMPONENT SIDE(A)

03 LCD BL
YB10325

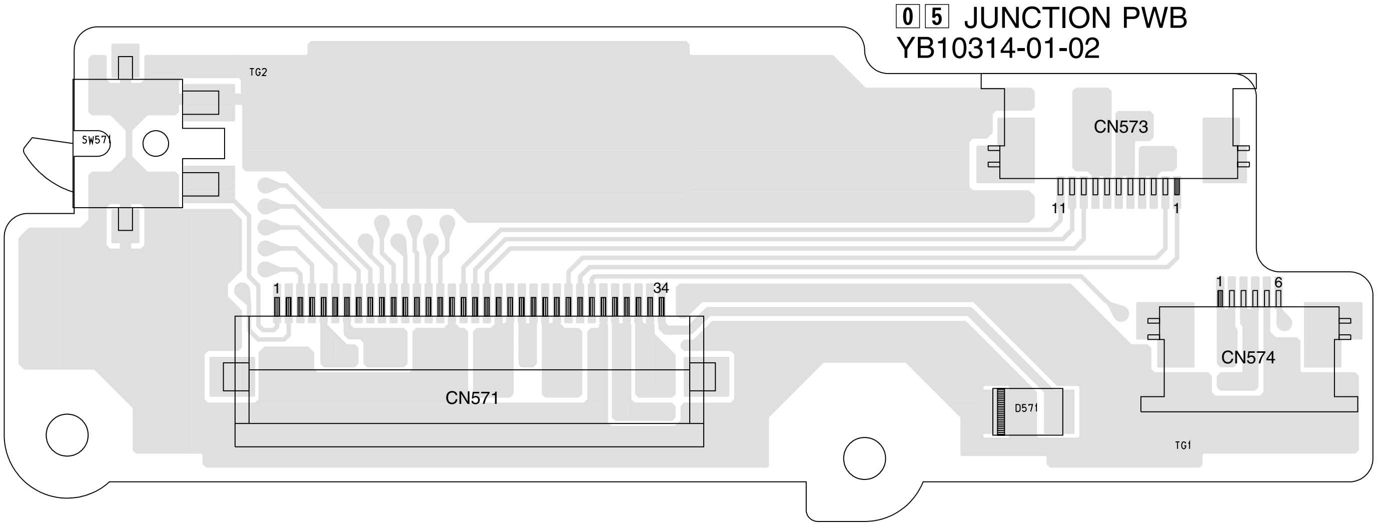


4.3 JUNCTION CIRCUIT BOARD

FOIL SIDE(B)

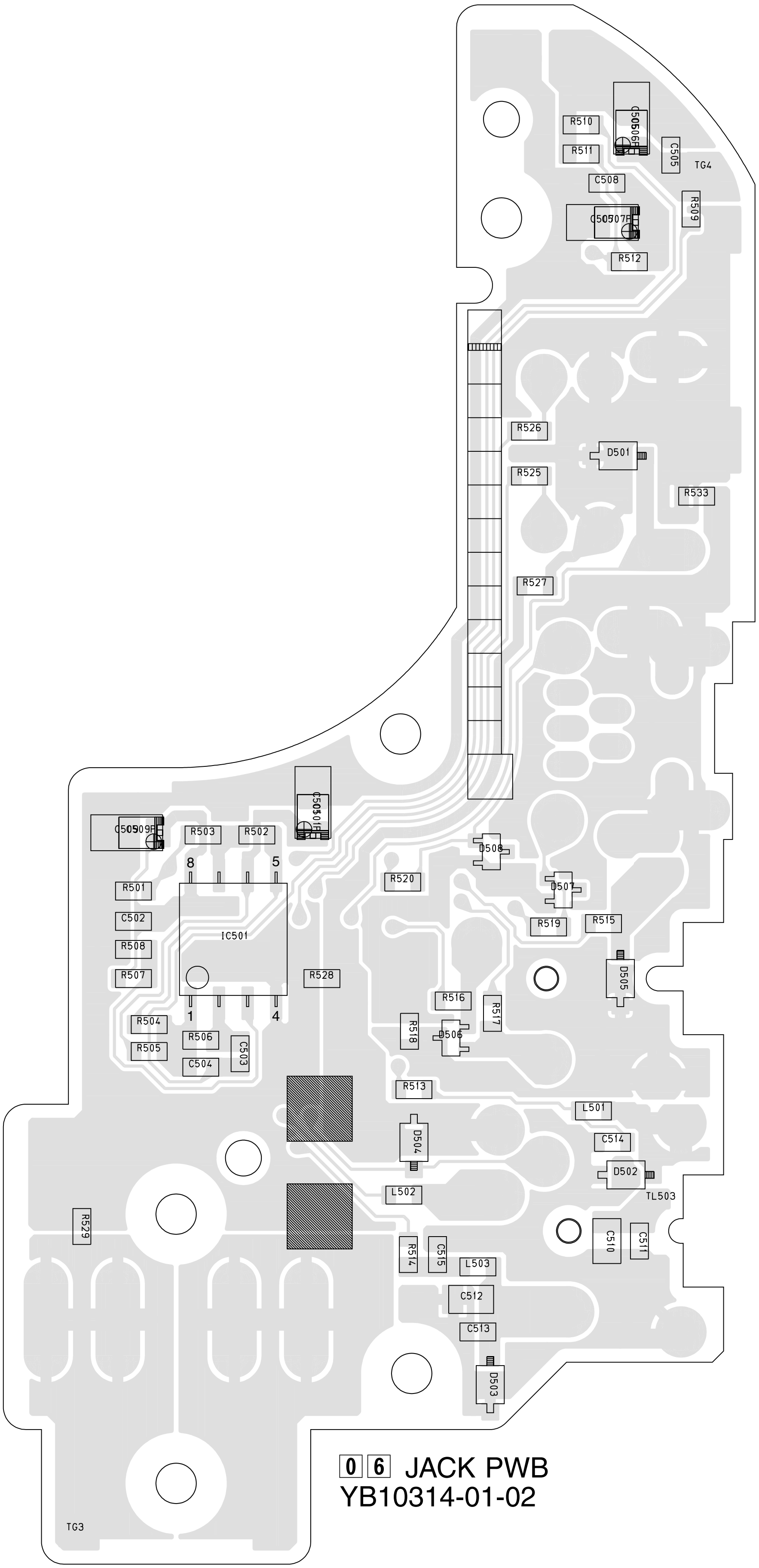

05 JUNCTION PWB
YB10314-01-02
TG4
15
CN572
1
TG3

COMPONENT SIDE(A)


05 JUNCTION PWB
YB10314-01-02
TG2
SW571
CN573
11
1
1
34
1
6
CN574
CN571
D571
TG1

4.4 JACK CIRCUIT BOARD

FOIL SIDE(B)


R510
C506
R511
C505
TG4
C508
R509
C507
R512
R526
D501
R525
R533
R527
C501
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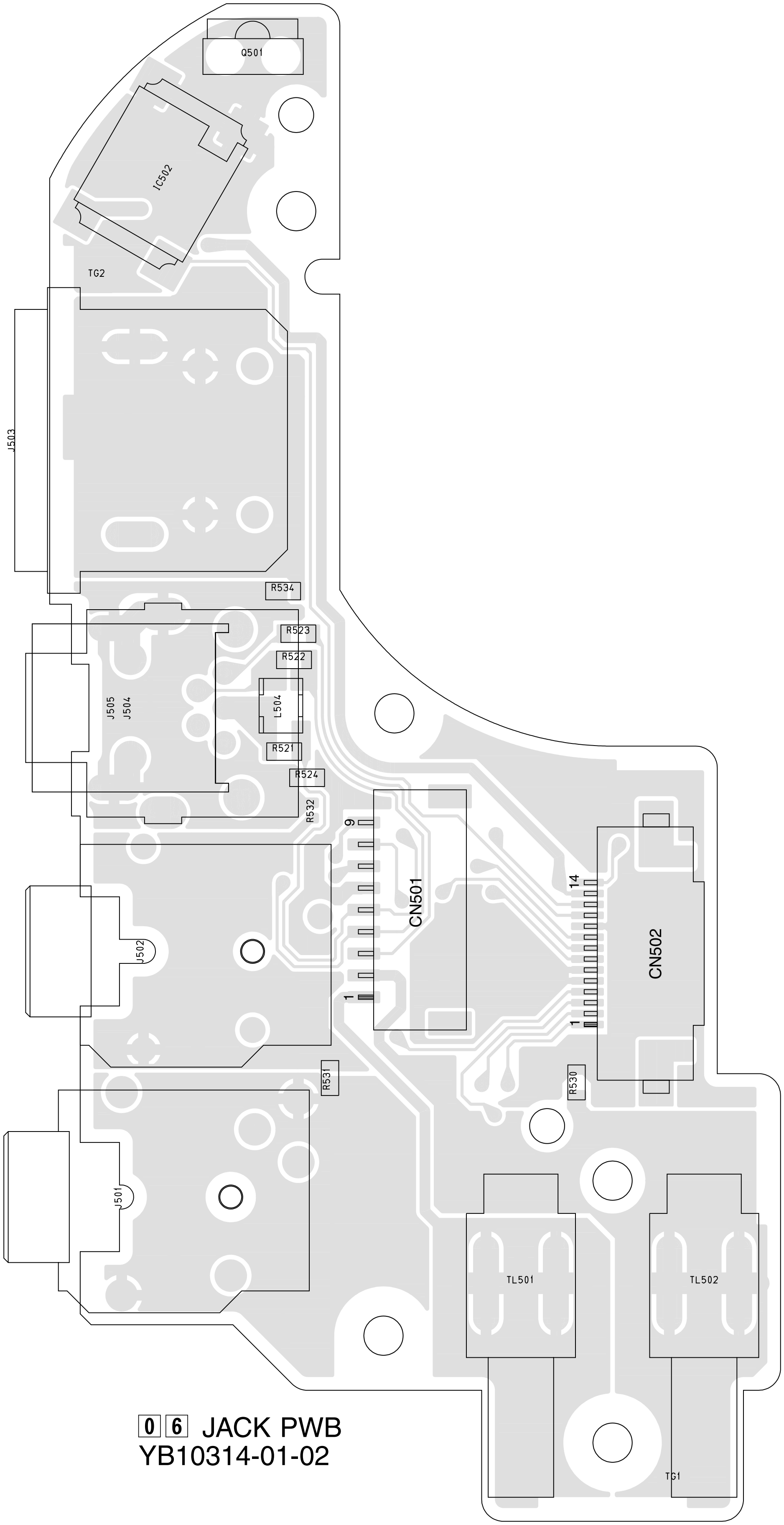
R503
R502
8
5
D508
R520
R501
D507
C502
R519
R515
IC501
R508
R507
R528
D505
R516
R517
R504
1
4
R518
D506
R506
C503
R505
C504
R513
L501
D504
C514
D502
L502
TL503
R529
C510
C511
R514
C515
L503
C512
C513
D503
0 6 JACK PWB
YB10314-01-02
TG3

COMPONENT SIDE(A)


Q501
IC502
TG2
J503
R534
R523
R522
L504
J505
J504
R521
R524
R532
9
1
CN501
14
1
CN502
J502
R531
R530
J501
TL501
TL502
TG1

06 JACK PWB
YB10314-01-02

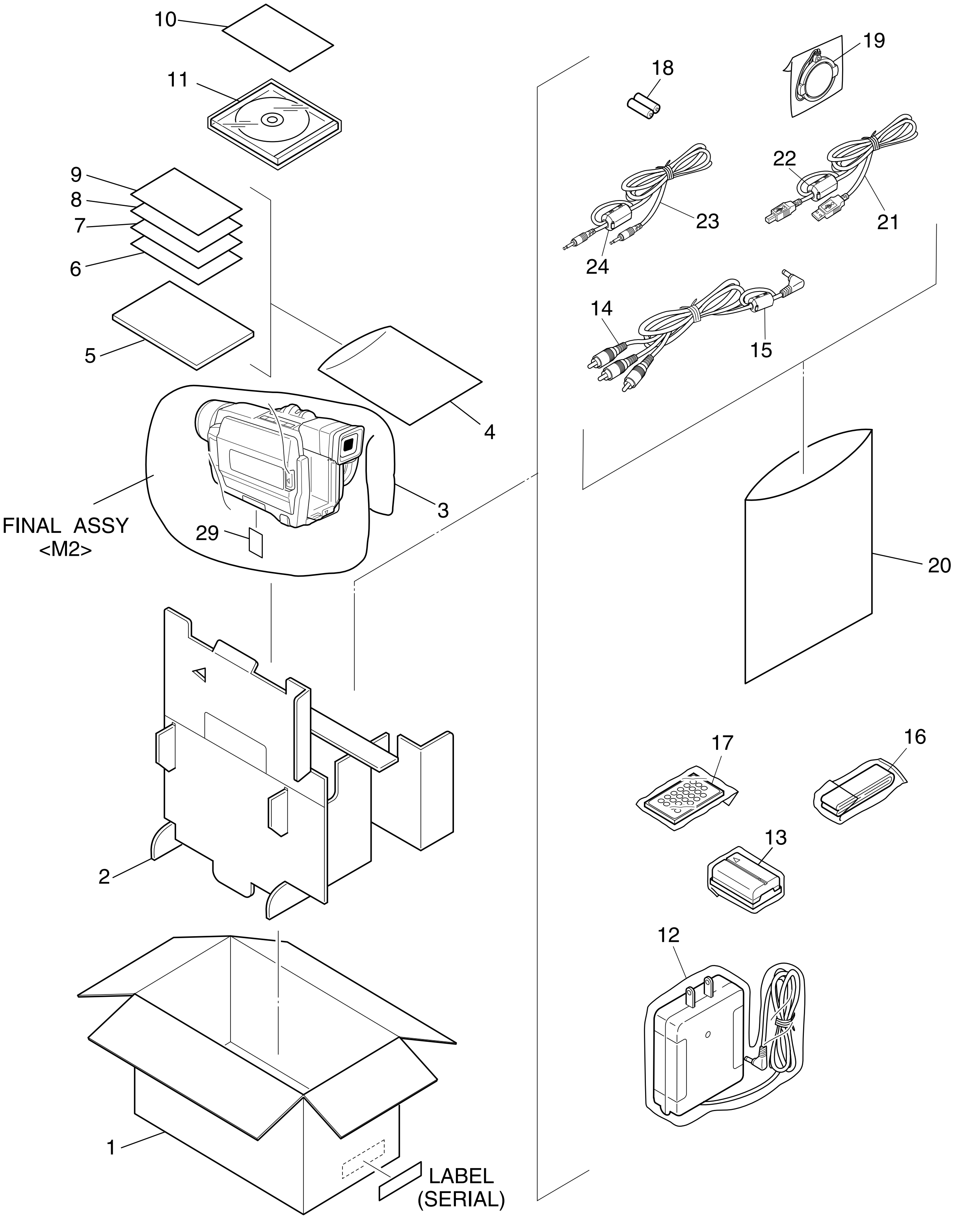
SECTION 5
PARTS LIST

SAFETY PRECAUTION

Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.

5.1 PACKING AND ACCESSORY ASSEMBLY <M1>

The instruction manual to be provided with this product will differ according to the destination.


10
11
9
8
7
6
5
4
3
FINAL ASSY
<M2>
29
2
1
LABEL
(SERIAL)
18
19
22
23
21
24
14
15
20
17
16
13
12

****

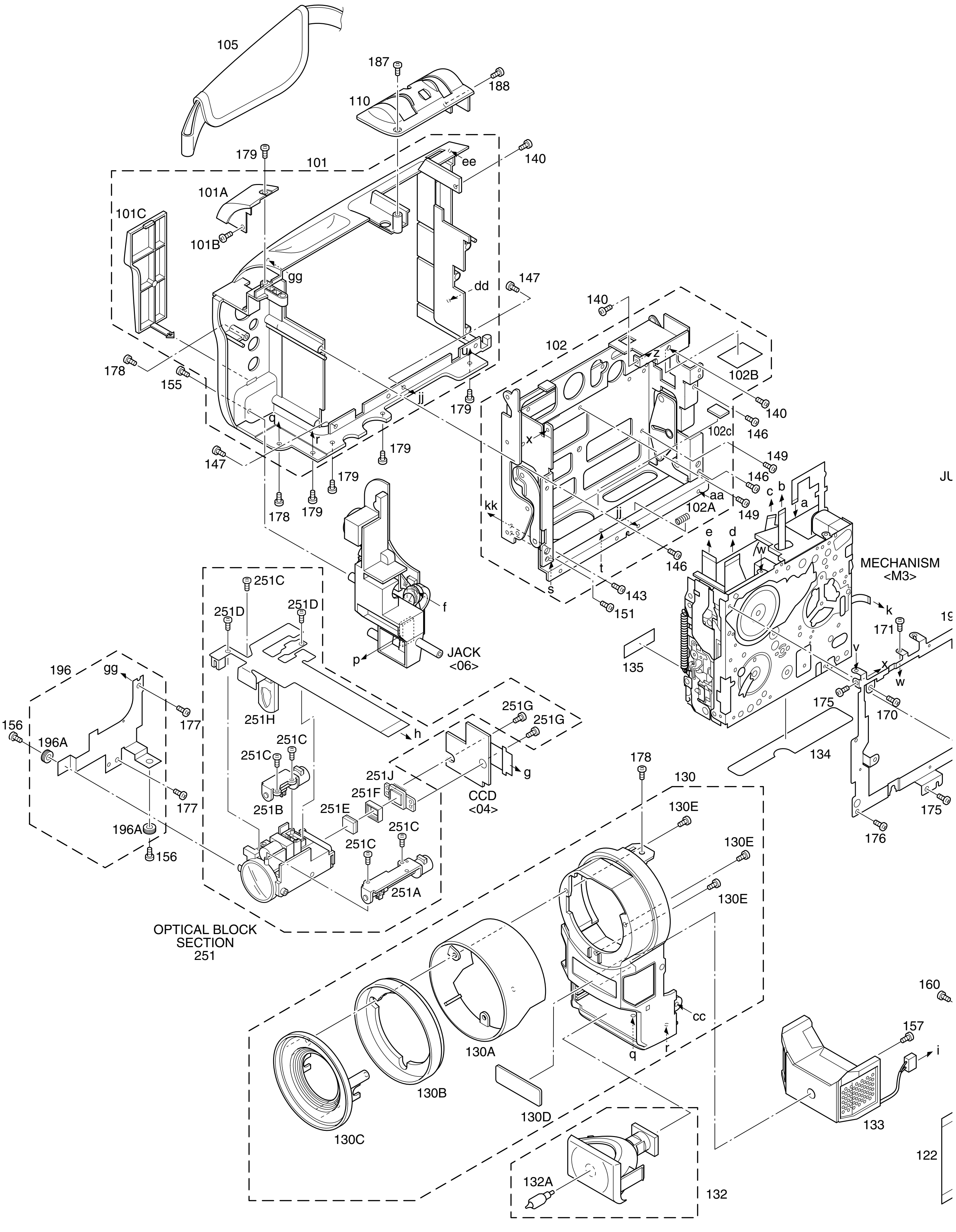
PACKING AND ACCESSORY ASSEMBLY <M1>

	REF No.	PART No.	PART NAME, DESCRIPTION
	1	LY32095-009A	PACKING CASE
	2	LY32096-001A	CUSHION
	3	LY30023-008A	POLY BAG
	4	QPA02003006	POLY BAG
⚠	5	LYT0815-001A	INST.BOOK(EN)
⚠		LYT0815-002A	INST.BOOK(FR)
⚠		LYT0815-003A	INST.BOOK(SP)
⚠	6	LYT0766-001B	INST.BOOK(SOFT.3LANG)
	7	LYT0378-003A	SHEET(AGREMENT)
	8	YU10350	Q.CARD(JCA)
	9	BT-51005-4	WARRANTY INF.
	10	BT-51020-2	REGIST.CARD
	11	LY32210-009A	CD ROM
⚠	12	LY20739-001A	AC ADAPTER,AP-V10U
⚠	13	LY31587-001A	BATTERY PACK,BN-V408U
	14	QAM0211-001	CABLE ASSY,AUDIO/VIDEO CABLE
	15	QQR0918-002	CORE FILTER
	16	LY20186-001A	SHOULDER STRAP
	17	LY20543-002A	REMOTE CONTROL UNIT,RM-V716U
	18	–	BATTERY,AAA(R03),X2
	19	LY42182-001A	LENS CAP
	20	QPGA017-03005	POLY BAG
	21	QAM0352-001	USB CABLE
	22	QQR0918-002	CORE FILTER
	23	PEAC0428-150	CABLE ASSY
	24	QQR0491-002	CORE FILTER
	29	QAM0262-002	MEMORY CARD

- **INSTRUCTIONS**

EN .... ENGLISH
FR .... FRENCH
SP .... SPANISH

5.2 FINAL ASSEMBLY <M2>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jj
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146
102c
q
r
x
179
149
147
179
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JU
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179
c
b
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aa
102A
149
kk
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d
w
t
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MECHANISM
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k
251C
251D
251D
JACK
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v
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w
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gg
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251G
196A
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251C
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251C
g
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251J
251F
CCD
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251B
251E
130E
196A
251C
176
156
251C
130E
251A
130E
OPTICAL BLOCK
SECTION
251
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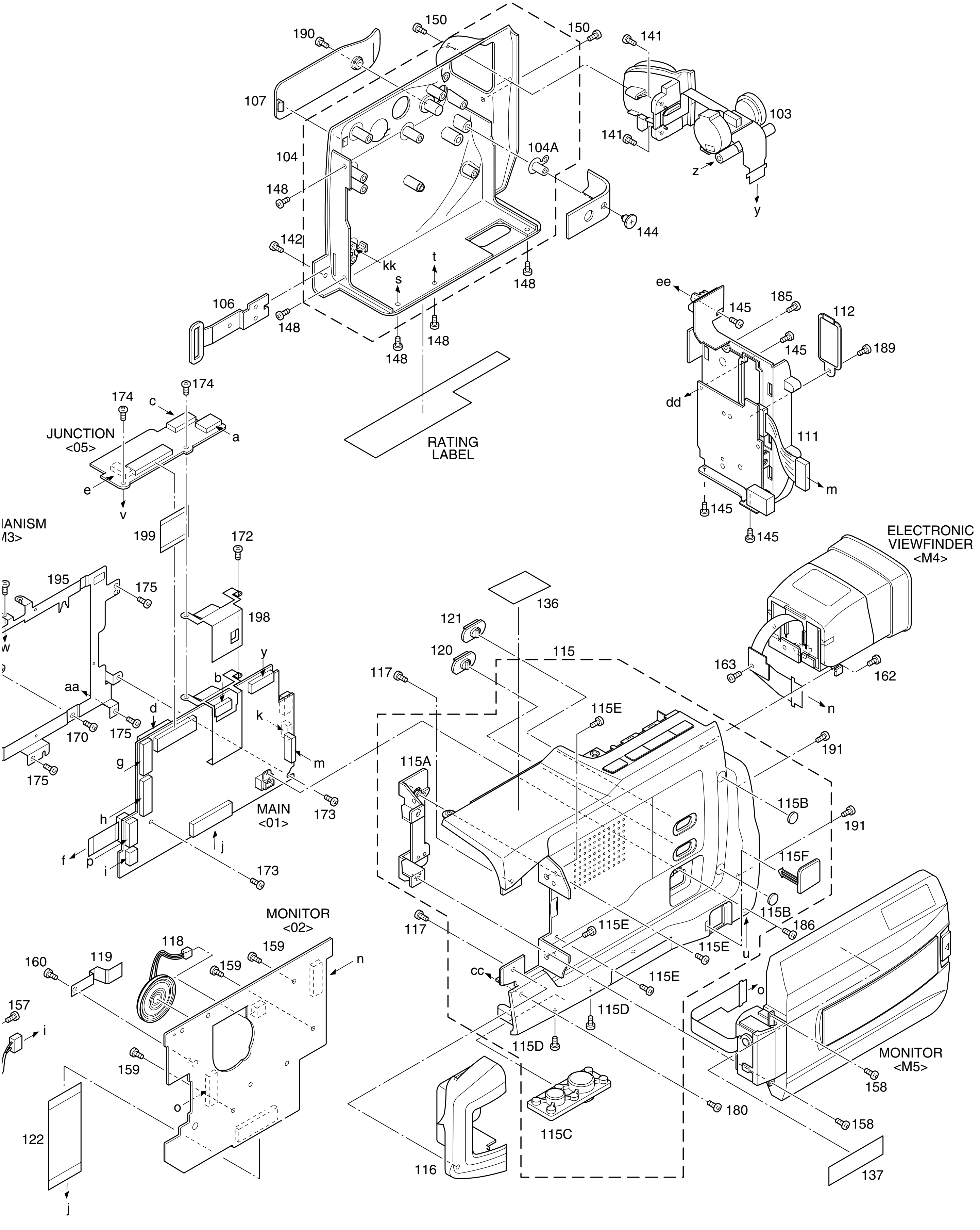
cc
157
130A
q
r
i
130B
130D
133
130C
122
132A
132



190
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150
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104A
104
z
y
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kk
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s
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ee
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112
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174
c
JUNCTION
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dd
111
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v
m
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ANISM
M3>
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145
ELECTRONIC
VIEWFINDER
<M4>
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120
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aa
b
d
k
n
115E
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115A
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m
115B
MAIN
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115F
f
p
i
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115B
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115E
115E
u
MONITOR
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119
159
115E
cc
o
157
115D
i
115D
MONITOR
<M5>
159
158
180
o
122
158
115C
116
137
j
RATING
LABEL

****

FINAL ASSEMBLY <M2>

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	101	LY20706-003C	LOWER CASE ASSY
	101A	LY32098-001A	WINDOW(IR)
	101B	LY30018-063A	SPECIAL SCREW
	101C	LY32099-001C	COVER(JACK)
	102	LY20697-001B	ARM ASSY
	102A	LY30001-023A	TENSION SPRING
	102B	LY30029-0C7A	SPACER(A)
	102C	LY30029-0E9A	SPACER(A)
	103	LY20693-001A	ZOOM UNIT
	104	LY20704-001B	CASS.COVER ASSY
	104A	LY40592-001A	CAP(GRIP BELT)
	105	LY20575-004B	GRIP BELT
	106	LY42891-001A	HOOK(GRIP)
	107	LY32092-032A	COVER(AJUST)
	110	LY32093-001A	COVER(ZOOM)ASSY
	111	LY20725-001A	REAR UNIT
	112	LY41691-001A	COVER(JIG)
	115	LY20707-004B	UPPER CASE(2.5) ASSY
	115A	LY32101-001A	BRACKET
	115B	LY40664-001A	SPACER,X2
	115C	LY31019-001A	BASE
	115D	LY30018-084A	SPECIAL SCREW,X2
	115E	LY30018-0A8A	SPECIAL SCREW,X4
	115F	LY42866-001A	CAP(DC JACK)
	116	LY32106-001A	COVER(HINGE)
	117	LY30018-084A	SPECIAL SCREW,X2
	118	QAS0048-001	SPEAKER
	119	LY42167-001A	PLATE(SPK)
	120	LY42919-001A	KNOB(SLIDE)
	121	LY42919-002A	KNOB(SLIDE)
	122	QUQ105-5007AA	FFC WIRE,MAIN CN101-MONI CN761
⚠	130	LY20711-001A	FRONT COVER ASSY
	130A	LY32111-001A	HOOD
	130B	LY32112-001A	RING
	130C	LY32113-001A	HOOD(SCREW)
	130D	LY42953-001A	MARK
	130E	LY30018-052A	SPECIAL SCREW,X3
	132	LY31617-002A	DC LIGHT ASSY
	132A	YQ44266	LAMP
	133	LY32114-001A	MICROPHONE
	134	LY40698-002A	LABEL(HOUSING)
	135	LY40699-002A	LABEL(PUSH)
	136	LY43093-012A	STICKER(TOP)
	137	LY43094-003A	STICKER(SIDE)
	140	LY30018-084A	SPECIAL SCREW,X3
	141	LY30018-096A	SPECIAL SCREW,X2
	142	LY30018-038A	SPECIAL SCREW
	143	LY30018-084A	SPECIAL SCREW
	144	LY30018-0D1A	SPECIAL SCREW
	145	LY30018-084A	SPECIAL SCREW,X4
	146	LY30018-084A	SPECIAL SCREW,X3
	147	LY30018-038A	SPECIAL SCREW,X2
	148	LY30018-038A	SPECIAL SCREW,X5
	149	LY30018-084A	SPECIAL SCREW,X2
	150	LY30018-084A	SPECIAL SCREW,X2
	151	LY30018-023A	SPECIAL SCREW
	155	LY30018-084A	SPECIAL SCREW
	156	LY30019-029B	SPECIAL SCREW,X2
	157	LY30018-023A	SPECIAL SCREW
	158	LY30018-0D6A	SPECIAL SCREW,X2
	159	LY30018-023A	SPECIAL SCREW,X3
	160	LY30018-006B	SPECIAL SCREW
	162	LY30018-063A	SPECIAL SCREW
	163	LY30018-064A	SPECIAL SCREW
	170	LY30019-026A	SPECIAL SCREW,X2
	171	YQ43893-4	MINI SCREW
	172	YQ43893-4	MINI SCREW
	173	LY30019-033A	SPECIAL SCREW,X2
	174	QYSPSPT1730Z	SCREW,X2
	175	LY30018-066A	SPECIAL SCREW,X4
	176	LY30018-084A	SPECIAL SCREW
	177	LY30018-084A	SPECIAL SCREW,X2
	178	LY30018-084A	SPECIAL SCREW,X3
	179	LY30018-084A	SPECIAL SCREW,X5
	180	LY30018-092A	SPECIAL SCREW
	185	LY30018-065A	SPECIAL SCREW
	186	LY30018-006B	SPECIAL SCREW
	187	LY30018-092A	SPECIAL SCREW
	188	LY30018-065A	SPECIAL SCREW
	189	LY30018-037A	SPECIAL SCREW
	190	LY30018-037A	SPECIAL SCREW
	191	LY30018-084A	SPECIAL SCREW,X2
	195	LY20696-001A	BRACKET(MECHA)
	196	LY42846-001A	BKT(OP) ASSY
	196A	LY42796-001A	BUSH,X2
	198	LY32081-001A	SHIELD PLATE
	199	WJT0044-001A	E-CARD WIRE,MAIN CN113-JUNC CN571

– OPTICAL BLOCK SECTION –

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	251	J7A-133A	OPTICAL BLOCK ASSY
	251A	LY30723-001B	ZOOM MOTOR
	251B	LY30724-001B	FOCUS MOTOR
	251C	LY30727-002A	SCREW,X5
	251D	LY30727-001A	SCREW,X2
	251E	LY42936-001A	OPTICAL LPF
	251F	LY31639-001A	SPACER RUBBER
	251G	QYSPSGU1750Z	SCREW,X2
	251H	LY32160-001A	IRIS MOTOR
	251J	YS40168E	CCD BASE ASSY

SECTION 4
CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components identified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

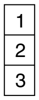
1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ (1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in µF, (P: PF).
3) All inductance values are in µH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

2. Indications of control voltage

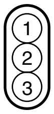
AUX : Active at high.

$\overline{\text{AUX}}$ or AUX(L) : Active at low.

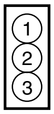
3. Interpreting Connector indications



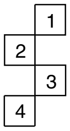
Removable connector



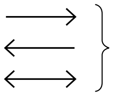
Wire soldered directly on board



Non-removable Board connector



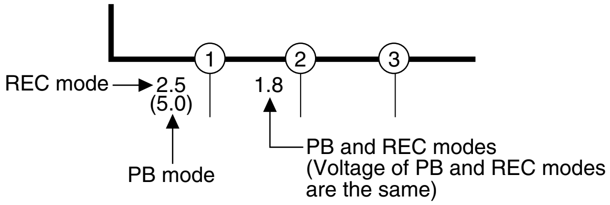
Board to Board



Connected pattern on board
The arrows indicate signal path

4. Voltage measurement

1) Regulator (DC/DC CONV) circuits
   REC : Colour bar signal.
   PB : Alignment tape (Colour bar).
   — : Unmeasurable or unnecessary to measure.
4) Indication on schematic diagram
   Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Signal path Symbols

The arrows indicate the signal path as follows.

NOTE : The arrow is DVC unique object.

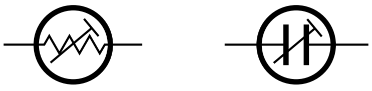
⇨ Playback signal path
⮕ Playback and recording signal path
➡ Recording signal path
(including E-E signal path)
⇨▷ Capstan servo path
➡▶ Drum servo path

(Example)

⇨ R-Y Playback R-Y signal path
➡ Y Recording Y signal path

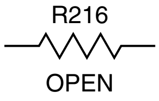
6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.



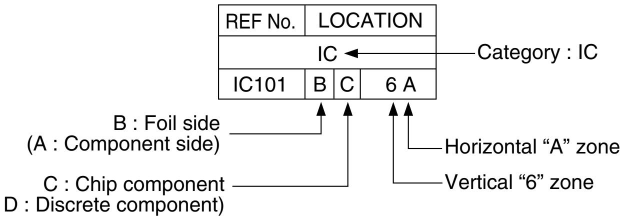
CIRCUIT BOARD NOTES

1. Foil and Component sides

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

2. Parts location guides

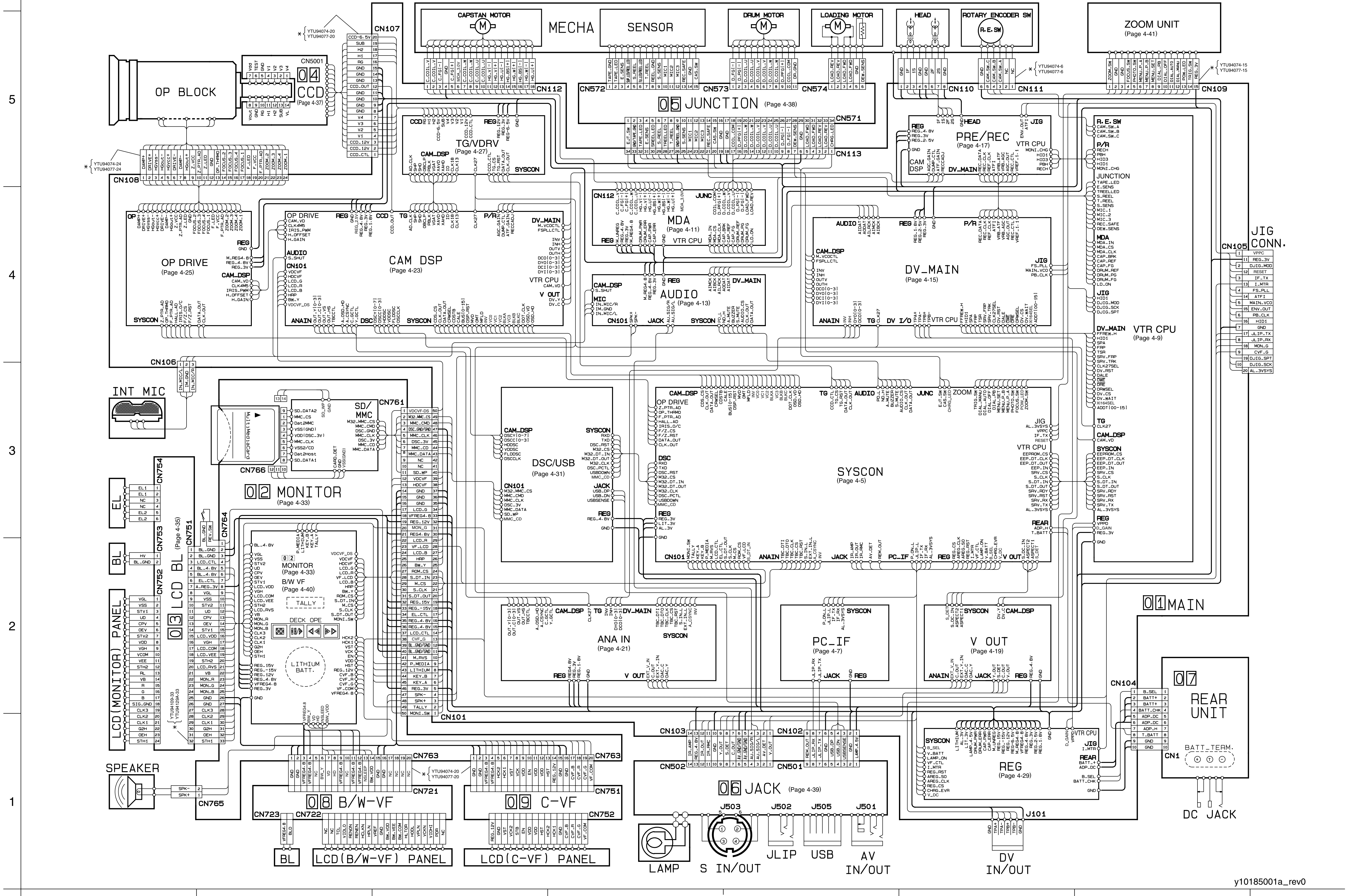
Parts location are indicated by guide scale on the circuit board.


REF No.
LOCATION
IC
Category : IC
IC101
B
C
6 A
B : Foil side
(A : Component side)
C : Chip component
D : Discrete component)
Horizontal “A” zone
Vertical “6” zone

Note: For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

4.1 BOARD INTERCONNECTIONS

NOTE) ※ : The number of patch cords are indicated by interconnected.



MECHA
CAPSTAN MOTOR
SENSOR
DRUM MOTOR
LOADING MOTOR
HEAD
ROTARY ENCODER SW
ZOOM UNIT (Page 4-41)
OP BLOCK
04 CCD (Page 4-37)
CN5001
CN107
CN108
CN112
CN572
CN573
CN574
CN571
CN113
CN110
CN111
CN109
05 JUNCTION (Page 4-38)
TG/VDRV (Page 4-27)
PRE/REC (Page 4-17)
OP DRIVE (Page 4-25)
CAM DSP (Page 4-23)
MDA (Page 4-11)
AUDIO (Page 4-13)
DV_MAIN (Page 4-15)
VTR CPU (Page 4-9)
JIG CONN.
CN105
CN106
INT MIC
SD/MMC
CN761
CN766
02 MONITOR (Page 4-33)
MONITOR (Page 4-33)
B/W VF (Page 4-40)
TALLY
DECK OPE
LITHIUM BATT.
DSC/USB (Page 4-31)
SYSCON (Page 4-5)
ANA IN (Page 4-21)
PC_IF (Page 4-7)
V OUT (Page 4-19)
01 MAIN
07 REAR UNIT
BATT_TERM.
CN104
CN1
DC JACK
EL
BL
LCD(MONITOR) PANEL
03 LCD BL (Page 4-35)
CN754
CN753
CN752
CN751
CN764
CN101
SPEAKER
CN765
CN763
08 B/W-VF
CN721
CN723
CN722
BL
LCD(B/W-VF) PANEL
09 C-VF
CN751
CN752
LCD(C-VF) PANEL
CN103
CN102
CN502
CN501
06 JACK (Page 4-39)
J503
J502
J505
J501
LAMP
S IN/OUT
JLIP
USB
AV IN/OUT
REG (Page 4-29)
J101
DV IN/OUT
※ YTU94074-20 YTU94077-20
※ YTU94074-24 YTU94077-24
※ YTU94074-6 YTU94077-6
※ YTU94074-15 YTU94077-15
※ YTU94109-33 YTU94129A-33
1
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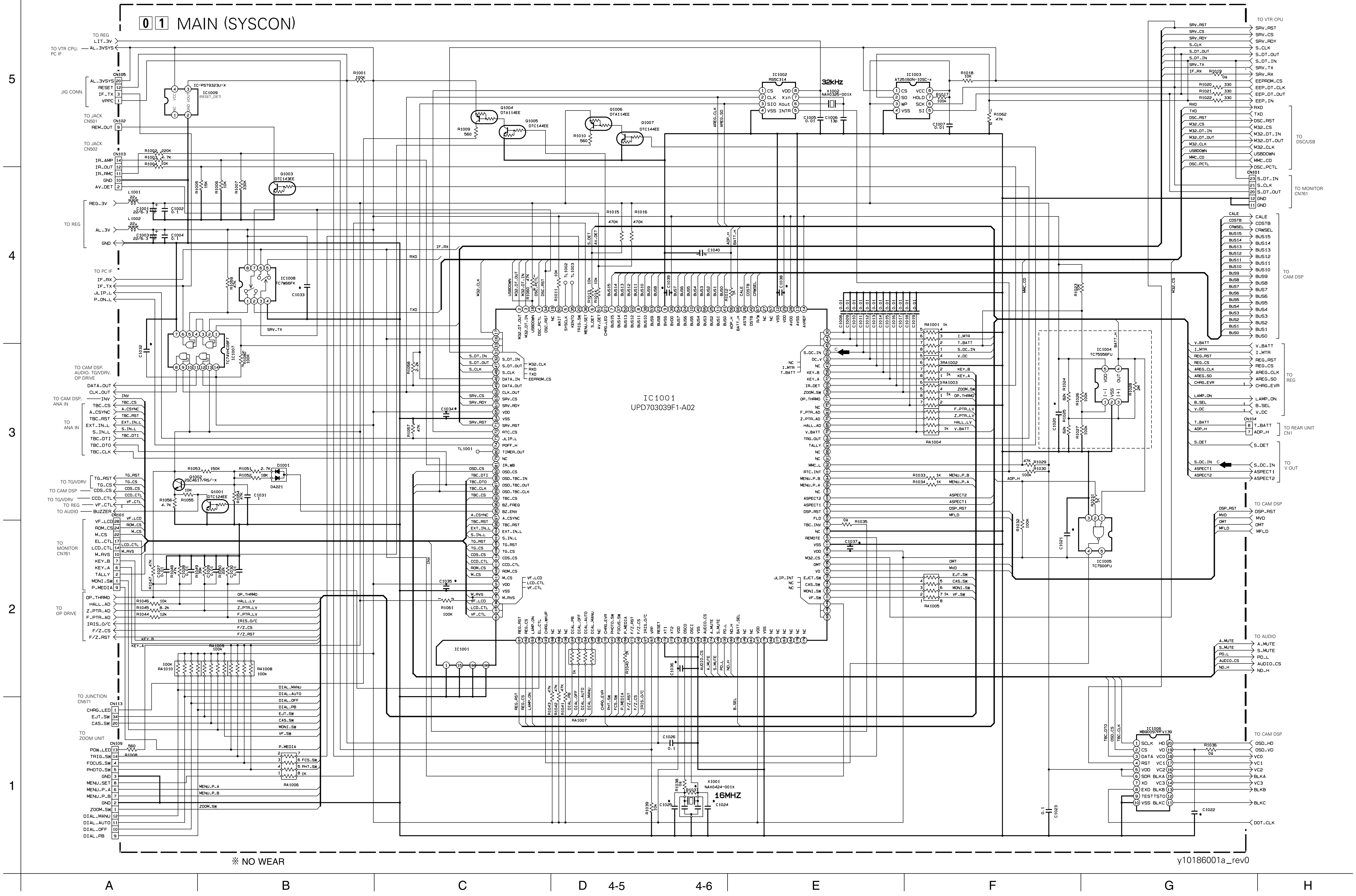
y10185001a_rev0

4.2 SYSCON SCHEMATIC DIAGRAM

NOTES :
- For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".
- The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



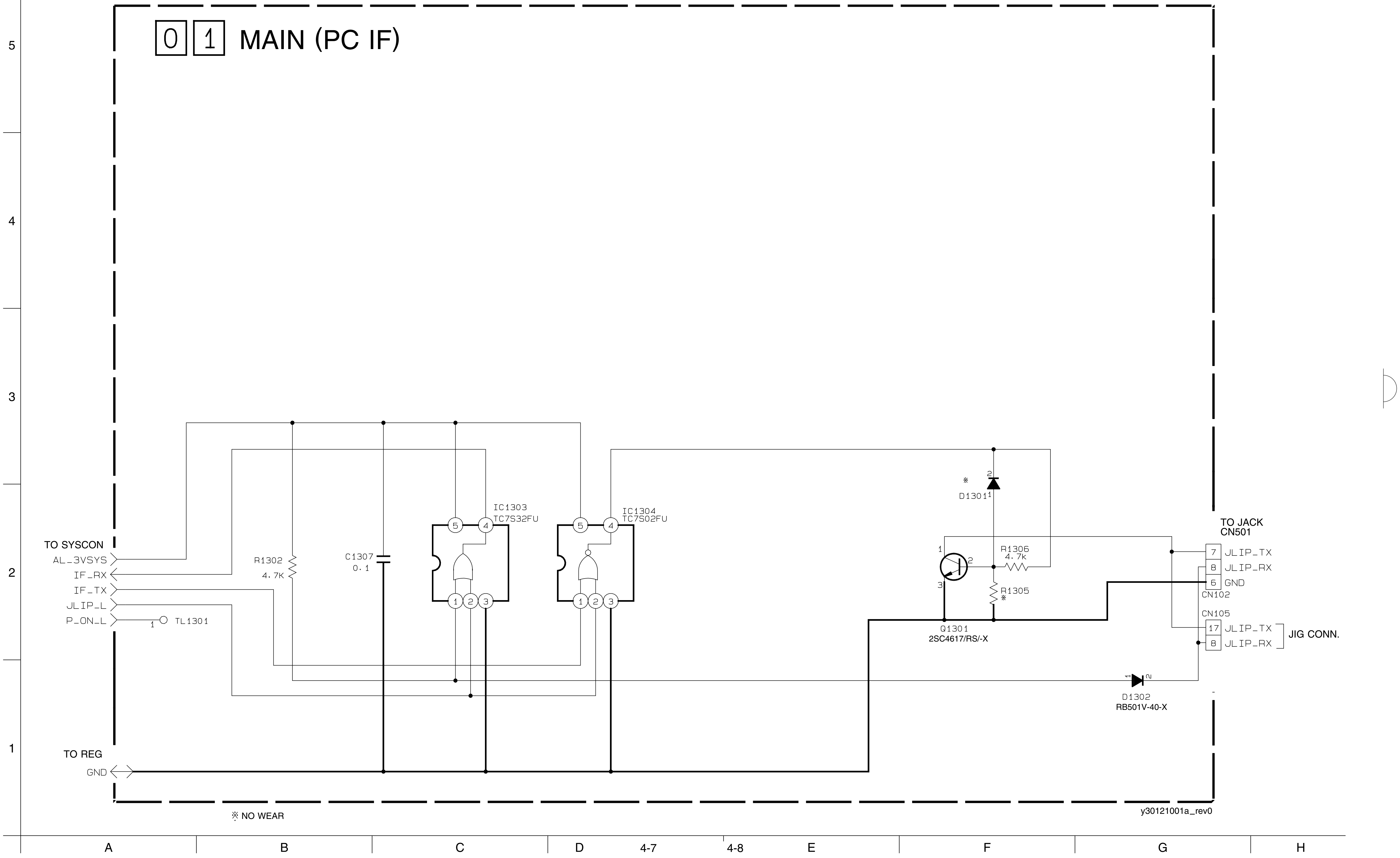
01 MAIN (SYSCON)
IC1001
UPD703039F1-A02
IC1002
R5C314
32kHz
X1002
NAX0325-001X
IC1003
AT25160N-10SC-x
IC1004
TC75S56FU
IC1005
TC7S00FU
IC1006
MB90097PFV139
IC1007
TC74HC08FT
IC1008
TC7W66FK
IC1009
IC-PST9323U-X
(RESET_DET)
X1001
NAX0424-001X
16MHZ
Q1001
DTC124EE
Q1002
2SC4617/RS/-X
Q1003
DTC143EE
Q1004
DTA114EE
Q1005
DTC144EE
Q1006
DTA114EE
Q1007
DTC144EE
D1001
DA221
TO REG
TO VTR CPU, PC IF
JIG CONN.
TO JACK CN501
TO JACK CN502
TO PC IF
TO CAM DSP, AUDIO, TG/VDRV, OP DRIVE
TO CAM DSP, ANA IN
TO ANA IN
TO TG/VDRV
TO CAM DSP
TO AUDIO
TO MONITOR CN761
TO OP DRIVE
TO JUNCTION CN571
TO ZOOM UNIT
TO VTR CPU
TO DSC/USB
TO CAM DSP
TO REG
TO REAR UNIT CN1
TO V OUT
TO CAM DSP
TO AUDIO
TO CAM DSP
CN101
CN102
CN103
CN104
CN105
CN109
CN113
RA1001
RA1002
RA1003
RA1004
RA1005
RA1006
RA1007
RA1008
RA1009
RA1010
SRV_RST
SRV_CS
SRV_RDY
S_CLK
S_DT_OUT
S_DT_IN
SRV_TX
SRV_RX
EEPROM_CS
EEP_DT_CLK
EEP_DT_OUT
EEP_IN
RXD
TXD
DSC_RST
M32_CS
M32_DT_IN
M32_DT_OUT
M32_CLK
USBDOWN
MMC_CD
DSC_PCTL
CALE
CDSTB
CRWSEL
BUS15
BUS14
BUS13
BUS12
BUS11
BUS10
BUS9
BUS8
BUS7
BUS6
BUS5
BUS4
BUS3
BUS2
BUS1
BUS0
V_BATT
I_MTR
REG_RST
REG_CS
AREG_CLK
AREG_SO
CHRG_EVR
LAMP_ON
B_SEL
V_DC
T_BATT
ADP_H
S_DET
S_DC_IN
ASPECT1
ASPECT2
DSP_RST
MVD
OMT
MFLD
A_MUTE
S_MUTE
PD_L
AUDIO_CS
ND_H
OSD_HD
OSD_VD
VC0
VC1
VC2
BLKA
VC3
BLKB
BLKC
DOT_CLK
LIT_3V
AL_3VSYS
RESET
IF_TX
VPPC
REM_OUT
IR_AMP
IR_OUT
IR_RMC
GND
AV_DET
REG_3V
AL_3V
IF_RX
JLIP_L
P_ON_L
DATA_OUT
CLK_OUT
INV
TBC_CS
A_CSYNC
TBC_RST
EXT_IN_L
S_IN_L
TBC_DTI
TBC_DTO
TBC_CLK
TG_RST
TG_CS
CDS_CS
CCD_CTL
VF_CTL
BUZZER
VF_LCD
ROM_CS
M_CS
EL_CTL
LCD_CTL
M_RVS
KEY_B
KEY_A
TALLY
MONI_SW
P_MEDIA
OP_THRMO
HALL_AD
Z_PTR_AD
F_PTR_AD
IRIS_O/C
F/Z_CS
F/Z_RST
CHRG_LED
EJT_SW
CAS_SW
POW_LED
TRIG_SW
FOCUS_SW
PHOTO_SW
MENU_SET
MENU_P_A
MENU_P_B
ZOOM_SW
DIAL_MANU
DIAL_AUTO
DIAL_OFF
DIAL_PB
A
B
C
D
E
F
G
H
1
2
3
4
5

※ NO WEAR

y10186001a_rev0

4.3 PC IF SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



0 1 MAIN (PC IF)
TO SYSCON
AL_3VSYS
IF_RX
IF_TX
JLIP_L
P_ON_L
1 TL1301
R1302
4.7K
C1307
0.1
IC1303
TC7S32FU
IC1304
TC7S02FU
5
4
1
2
3
※
D1301
Q1301
2SC4617/RS/-X
R1306
4.7k
R1305
※
D1302
RB501V-40-X
TO JACK
CN501
7 JLIP_TX
8 JLIP_RX
6 GND
CN102
CN105
17 JLIP_TX
8 JLIP_RX
JIG CONN.
TO REG
GND
※ NO WEAR
y30121001a_rev0
5
4
3
2
1
A
B
C
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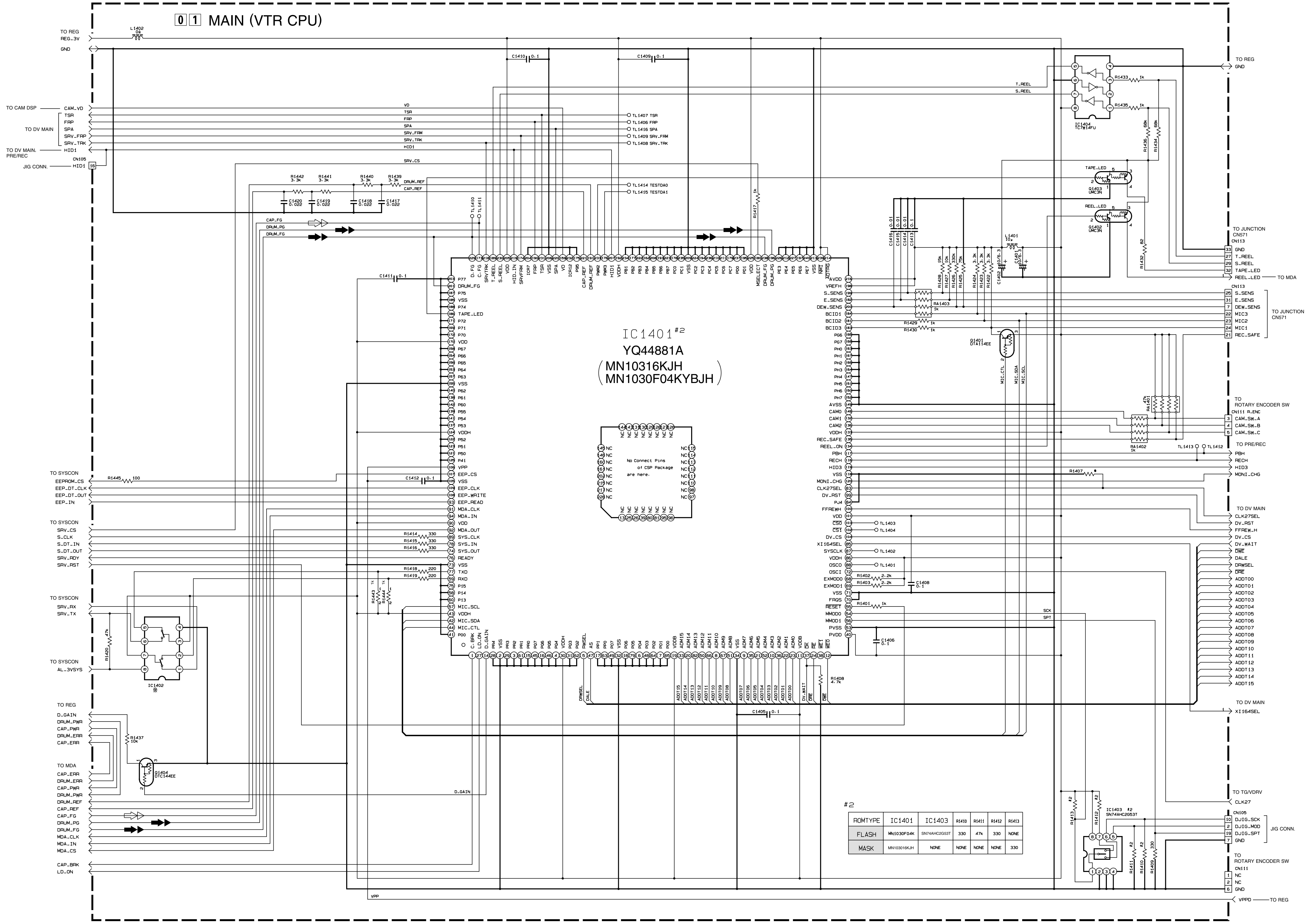
G
H

4.4 VTR CPU SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



01 MAIN (VTR CPU)
IC1401 #2
YQ44881A
(MN10316KJH
MN1030F04KYBJH)
No Connect Pins of CSP Package are here.
IC1402 ※
IC1403 #2 SN74AHC2G53T
IC1404 TC7W14FU
Q1401 DTA114EE
Q1402 UMC3N
Q1403 UMC3N
Q1404 DTC144EE
L1401
L1402
TO REG
REG_3V
GND
TO CAM DSP
CAM_VD
TO DV MAIN
TSR
FRP
SPA
SRV_FRP
SRV_TRK
TO DV MAIN, PRE/REC
HID1
JIG CONN.
CN105
TO SYSCON
EEPROM_CS
EEP_DT_CLK
EEP_DT_OUT
EEP_IN
SRV_CS
S_CLK
S_DT_IN
S_DT_OUT
SRV_RDY
SRV_RST
SRV_RX
SRV_TX
AL_3VSYS
D_GAIN
DRUM_PWR
CAP_PWR
DRUM_ERR
CAP_ERR
TO MDA
CAP_REF
CAP_FG
DRUM_PG
DRUM_FG
MDA_CLK
MDA_IN
MDA_CS
CAP_BRK
LD_ON
TO JUNCTION CN571
CN113
T_REEL
S_REEL
TAPE_LED
REEL_LED
S_SENS
E_SENS
DEW_SENS
MIC3
MIC2
MIC1
REC_SAFE
TO ROTARY ENCODER SW
CN111 R_ENC
CAM_SW_A
CAM_SW_B
CAM_SW_C
TO PRE/REC
PBH
RECH
HID3
MONI_CHG
CLK27SEL
DV_RST
FFREW_H
DV_CS
DV_WAIT
DALE
DRWSEL
ADDT00
ADDT01
ADDT02
ADDT03
ADDT04
ADDT05
ADDT06
ADDT07
ADDT08
ADDT09
ADDT10
ADDT11
ADDT12
ADDT13
ADDT14
ADDT15
XI164SEL
TO TG/VDRV
CLK27
DJIG_SCK
DJIG_MOD
DJIG_SPT
NC
VPPD
VPP
SCK
SPT
TL1407 TSR
TL1406 FRP
TL1416 SPA
TL1409 SRV_FRM
TL1408 SRV_TRK
TL1414 TESTDA0
TL1415 TESTDA1

#2

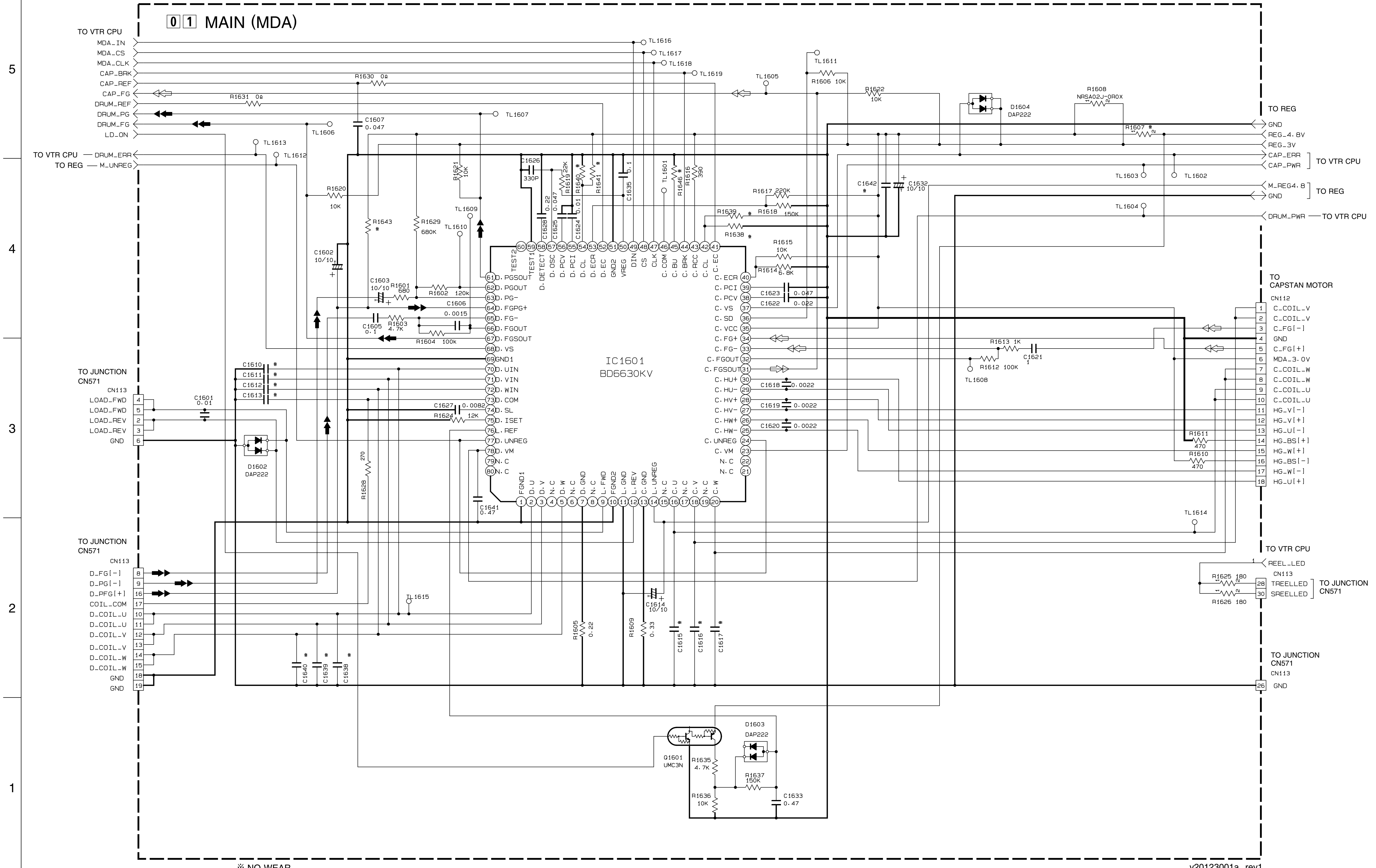
ROMTYPE	IC1401	IC1403	R1410	R1411	R1412	R1413
FLASH	MN1030F04K	SN74AHC2G53T	330	47k	330	NONE
MASK	MN103016KJH	NONE	NONE	NONE	NONE	330

※ NO WEAR

y10188001a_rev0

4.5 MDA SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



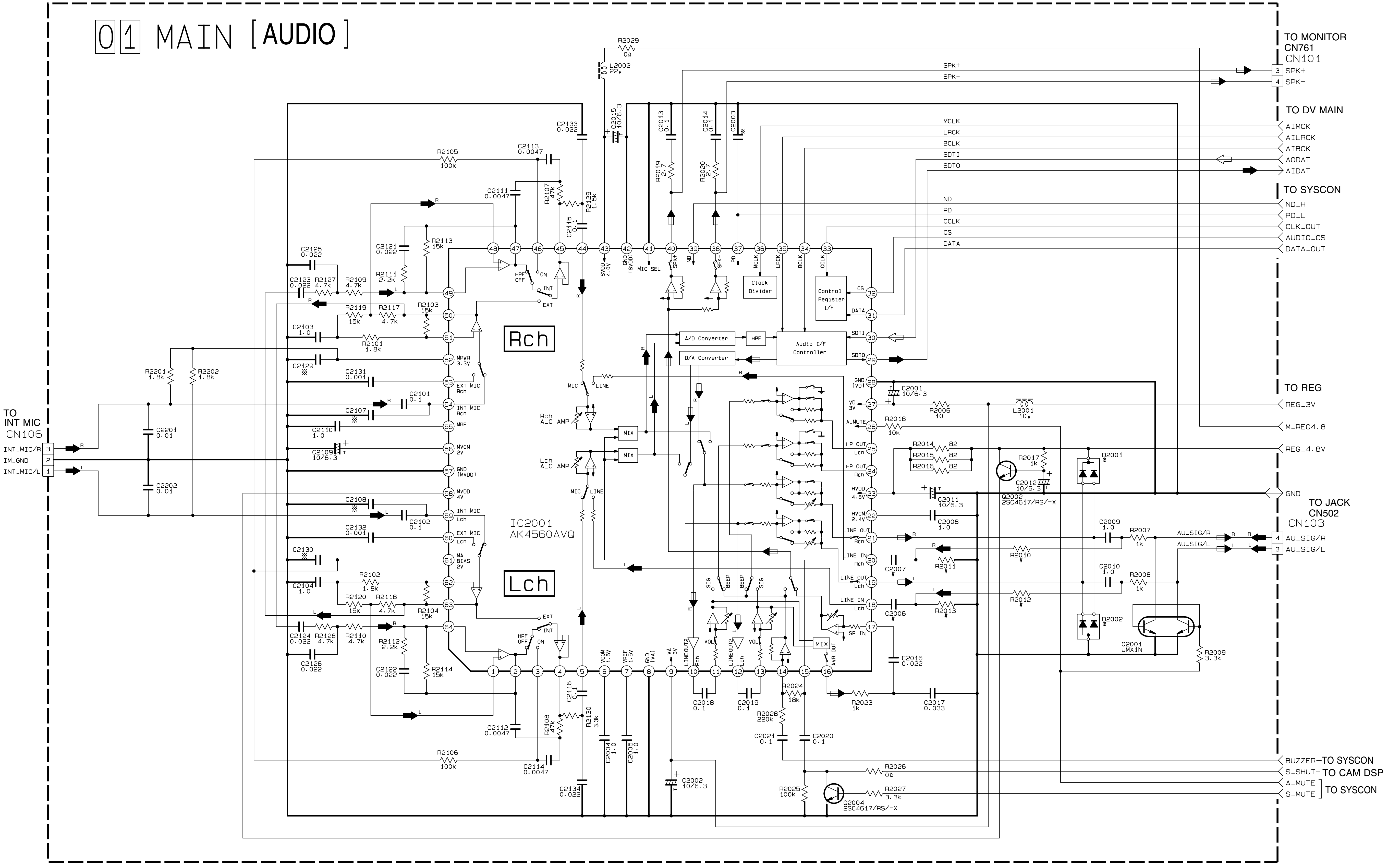
0 1 MAIN (MDA)
TO VTR CPU
MDA_IN
MDA_CS
MDA_CLK
CAP_BRK
CAP_REF
CAP_FG
DRUM_REF
DRUM_PG
DRUM_FG
LD_ON
TO VTR CPU — DRUM_ERR
TO REG — M_UNREG
TO JUNCTION CN571
CN113
LOAD_FWD
LOAD_FWD
LOAD_REV
LOAD_REV
GND
D_FG[-]
D_PG[-]
D_PFG[+]
COIL_COM
D_COIL_U
D_COIL_U
D_COIL_V
D_COIL_V
D_COIL_W
D_COIL_W
GND
GND
IC1601
BD6630KV
D1602 DAP222
D1603 DAP222
D1604 DAP222
Q1601 UMC3N
TO REG
GND
REG_4.8V
REG_3V
CAP_ERR
CAP_PWR
TO VTR CPU
M_REG4.8
GND
TO REG
DRUM_PWR — TO VTR CPU
TO CAPSTAN MOTOR
CN112
C_COIL_V
C_COIL_V
C_FG[-]
GND
C_FG[+]
MDA_3.0V
C_COIL_W
C_COIL_W
C_COIL_U
C_COIL_U
HG_V[-]
HG_V[+]
HG_U[-]
HG_BS[+]
HG_W[+]
HG_BS[-]
HG_W[-]
HG_U[+]
TO VTR CPU
REEL_LED
CN113
TREELLED
SREELLED
TO JUNCTION CN571
TO JUNCTION CN571
CN113
GND
R1630 0Ω
R1631 0Ω
C1607 0.047
R1620 10K
R1643
R1629 680K
R1621 10K
C1602 10/10
C1603 10/10
R1601 680
R1602 120k
C1606 0.0015
C1605 0.1
R1603 4.7K
R1604 100k
C1626 330P
C1628 0.22
C1625 0.047
C1624 0.01
R1619 22K
R1640
R1641
C1635 0.1
R1646
R1616 390
R1617 220K
R1618 150K
R1639
R1638
R1615 10K
R1614 6.8K
C1623 0.047
C1622 0.022
C1618 0.0022
C1619 0.0022
C1620 0.0022
C1642
C1632 10/10
R1606 10K
R1622 10K
R1608 NRSA02J-0R0X
R1607
R1613 1K
R1612 100K
C1621 1
R1611 470
R1610 470
C1610
C1611
C1612
C1613
C1601 0.01
C1627 0.0082
R1624 12K
R1628 270
C1641 0.47
R1605 0.22
R1609 0.33
C1614 10/10
C1615
C1616
C1617
C1640
C1639
C1638
R1625 180
R1626 180
R1635 4.7K
R1636 10K
R1637 150K
C1633 0.47
TL1601
TL1602
TL1603
TL1604
TL1605
TL1606
TL1607
TL1608
TL1609
TL1610
TL1611
TL1612
TL1613
TL1614
TL1615
TL1616
TL1617
TL1618
TL1619
TEST2
TEST1
D.DETECT
D.OSC
D.PCV
D.PCI
D.CL
D.ECR
D.EC
GND2
VREG
DIN
CS
CLK
C.COM
C.BU
C.BRK
C.RCC
C.CL
C.EC
D.PGSOUT
D.PGOUT
D.PG-
D.FGPG+
D.FG-
D.FGOUT
D.FGSOUT
D.VS
GND1
D.UIN
D.VIN
D.WIN
D.COM
D.SL
D.ISET
L.REF
D.UNREG
D.VM
N.C
N.C
C.ECR
C.PCI
C.PCV
C.VS
C.SD
C.VCC
C.FG+
C.FG-
C.FGOUT
C.FGSOUT
C.HU+
C.HU-
C.HV+
C.HV-
C.HW+
C.HW-
C.UNREG
C.VM
N.C
N.C
FGND1
D.U
D.V
N.C
D.W
N.C
D.GND
N.C
L.FWD
FGND2
L.GND
L.REV
C.GND
L.UNREG
N.C
C.U
N.C
C.V
N.C
C.W
5
4
3
2
1
A
B
C
D
E
F
G
H

※ NO WEAR

y20123001a_rev1

4.6 AUDIO SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*


01 MAIN [AUDIO]
IC2001
AK4560AVQ
Rch
Lch
TO MONITOR
CN761
CN101
SPK+
SPK-
TO DV MAIN
AIMCK
AILRCK
AIBCK
AODAT
AIDAT
MCLK
LRCK
BCLK
SDTI
SDTO
TO SYSCON
ND_H
PD_L
CLK_OUT
AUDIO_CS
DATA_OUT
ND
PD
CCLK
CS
DATA
TO REG
REG_3V
M_REG4.8
REG_4.8V
GND
TO JACK
CN502
CN103
AU_SIG/R
AU_SIG/L
BUZZER-TO SYSCON
S_SHUT-TO CAM DSP
A_MUTE
S_MUTE
TO SYSCON
TO
INT MIC
CN106
INT_MIC/R
IM_GND
INT_MIC/L
Clock Divider
Control Register I/F
A/D Converter
D/A Converter
HPF
Audio I/F Controller
MIX
Rch ALC AMP
Lch ALC AMP
MIC
LINE
HPF OFF
ON
INT
EXT
R2029 0Ω
L2002 22μ
C2015 10/6.3
C2133 0.022
C2113 0.0047
R2105 100k
C2111 0.0047
R2107 47k
R2129 1.5k
C2115 0.1
C2013 0.1
C2014 0.1
C2003 ※
R2019 2.7
R2020 2.7
C2125 0.022
C2123 0.022
R2127 4.7k
R2109 4.7k
R2111 2.2k
C2121 0.022
R2113 15k
R2119 15k
R2117 4.7k
R2103 15k
C2103 1.0
R2101 1.8k
C2129 ※
C2131 0.001
C2101 0.1
C2107 ※
C2110 1.0
C2109 10/6.3
R2201 1.8k
R2202 1.8k
C2201 0.01
C2202 0.01
C2108 ※
C2102 0.1
C2132 0.001
C2130 ※
C2104 1.0
R2102 1.8k
R2120 15k
R2118 4.7k
R2104 15k
C2124 0.022
R2128 4.7k
R2110 4.7k
R2112 2.2k
C2126 0.022
C2122 0.022
R2114 15k
C2112 0.0047
R2108 47k
C2116 0.1
R2130 3.3k
R2106 100k
C2114 0.0047
C2134 0.022
C2004 1.0
C2005 1.0
C2002 10/6.3
C2018 0.1
C2019 0.1
R2024 18k
R2028 220k
C2021 0.1
C2020 0.1
R2023 1k
C2017 0.033
C2016 0.022
R2026 0Ω
R2027 3.3k
R2025 100k
Q2004 2SC4617/RS/-X
C2001 10/6.3
R2006 10
L2001 10μ
R2018 10k
R2014 82
R2015 82
R2016 82
R2017 1k
C2012 10/6.3
Q2002 2SC4617/RS/-X
C2011 10/6.3
C2008 1.0
D2001 ※
D2002 ※
C2009 1.0
R2007 1k
C2010 1.0
R2008 1k
R2010 #
R2011 #
R2012 #
R2013 #
C2007 #
C2006 #
Q2001 UMX1N
R2009 3.3k
SVDD 4.0V
GND (SVDD)
MIC SEL
MPWR 3.3V
EXT MIC Rch
INT MIC Rch
MRF
MVCM 2V
GND (MVDD)
MVDD 4V
INT MIC Lch
EXT MIC Lch
MA BIAS 2V
VCOM 1.5V
VREF 1.5V
GND (VA)
VA 3V
LINEOUT2 Rch
LINEOUT2 Lch
AVR OUT
SP IN
LINE IN Lch
LINE OUT Lch
LINE IN Rch
LINE OUT Rch
HVCM 2.4V
HVDD 4.8V
HP OUT Rch
HP OUT Lch
A_MUTE
VD 3V
GND (VD)
SDTO
SDTI
SIG
BEEP
VOL

※ NO WEAR

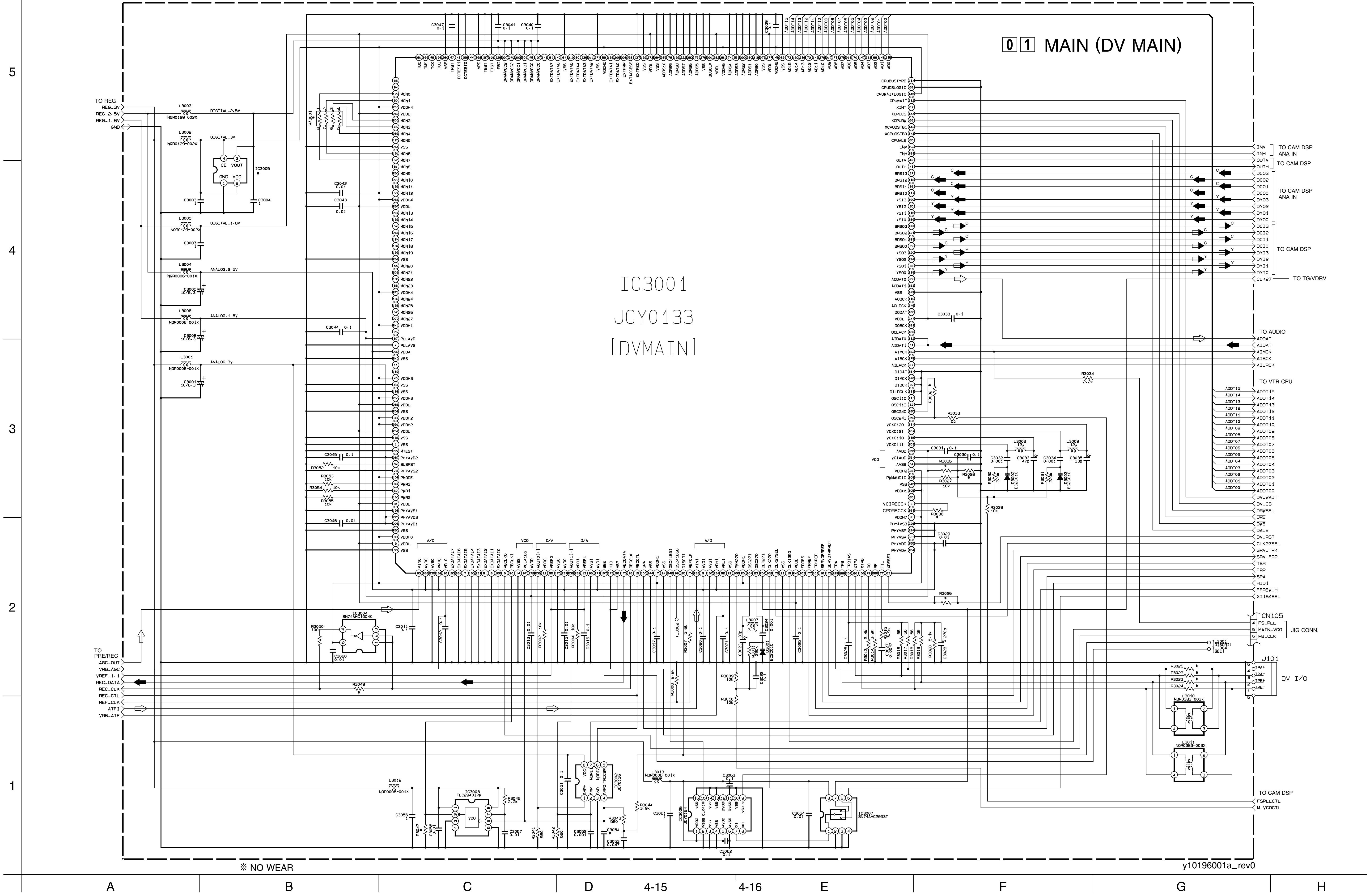
EXCHANGE PARTS LIST

	ANALOG IN	
	YES	NO
R2010	27k	※
R2011	22k	0 Ω
R2012	27k	※
R2013	22k	0 Ω
C2006	0.1	0.01
C2007	0.1	0.01

y20124001a_rev0

4.7 DV MAIN SCHEMATIC DIAGRAM

NOTES :
- For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".
- The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



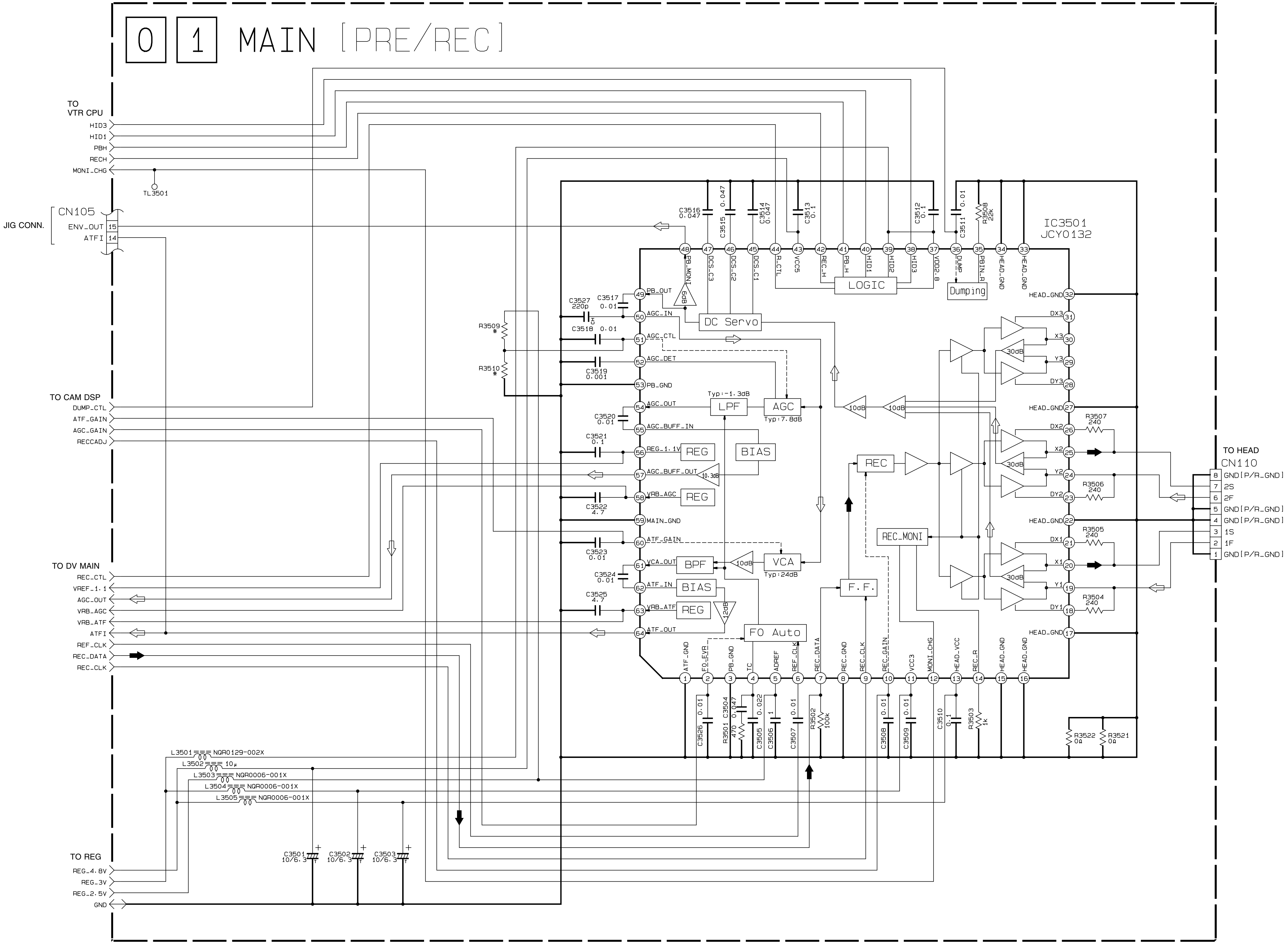
01 MAIN (DV MAIN)
IC3001
JCY0133
[DVMAIN]
TO REG
REG_3V
REG_2.5V
REG_1.8V
GND
L3003 NQR0129-002X
DIGITAL_2.5V
L3002 NQR0129-002X
DIGITAL_3V
IC3005
CE VOUT
GND VDD
C3003
C3004
L3005 NQR0129-002X
DIGITAL_1.8V
C3007
L3004 NQR0006-001X
ANALOG_2.5V
C3005 10/6.3
L3006 NQR0006-001X
ANALOG_1.8V
C3008 10/6.3
L3001 NQR0006-001X
ANALOG_3V
C3001 10/6.3
RA3001
C3042 0.01
C3043 0.01
C3044 0.1
C3045 0.1
R3052 10k
R3053 10k
R3054 10k
R3055 10k
C3046 0.01
C3047 0.1
C3041 0.1
C3040 0.1
C3039 0.1
C3038 0.1
TO CAM DSP ANA IN
TO CAM DSP
TO CAM DSP ANA IN
TO CAM DSP
TO TG/VDRV
INV
INH
OUTV
OUTH
DCO3
DCO2
DCO1
DCO0
DYO3
DYO2
DYO1
DYO0
DCI3
DCI2
DCI1
DCI0
DYI3
DYI2
DYI1
DYI0
CLK27
TO AUDIO
AODAT
AIDAT
AIMCK
AIBCK
AILRCK
TO VTR CPU
ADDT15
ADDT14
ADDT13
ADDT12
ADDT11
ADDT10
ADDT09
ADDT08
ADDT07
ADDT06
ADDT05
ADDT04
ADDT03
ADDT02
ADDT01
ADDT00
DV_WAIT
DV_CS
DRWSEL
DRE
DWE
DALE
DV_RST
CLK27SEL
SRV_TRK
SRV_FRP
TSR
FRP
SPA
HID1
FFREW_H
XI164SEL
R3034 2.2k
R3033 0Ω
R3032
VCO
C3031 0.1
C3030 0.1
C3032 0.001
C3033 47p
C3034 0.001
C3035 33p
L3008 12μ
L3009 12μ
R3030 220k
R3031 220k
D3002 EC20QS
D3003 EC20QS
R3035
R3027 10k
R3028
R3029 10k
R3036
C3029 0.01
R3026
CN105
FS_PLL
MAIN_VCO
PB_CLK
JIG CONN.
TL3001 DISCRI
TL3004 SBE1
J101
TPA+
TPA-
TPB+
TPB-
DV I/O
R3021
R3022
R3023
R3024
L3010 NQR0383-003X
L3011 NQR0383-003X
TO CAM DSP
FSPLLCTL
M_VCOCTL
TO PRE/REC
AGC_OUT
VRB_AGC
VREF_1.1
REC_DATA
REC_CLK
REC_CTL
REF_CLK
ATFI
VRB_ATF
A/D
VCO
D/A
D/A
A/D
IC3004 SN74HC1G04X
R3050 100
C3060 0.01
C3011 0.1
R3049
C3012 0.1
C3013 0.01
R3003 10k
C3015 0.01
R3004 10k
C3016 0.1
C3017 0.1
TL3002
R3007 1.5k
C3020 0.1
C3021 0.1
C3022 330
L3007 2.2μ
C3024 0.001
D3001 EC20QS
R3011
C3023 0.1
R3008 2.2k
R3009 10k
R3010 10k
C3025 0.1
C3026 1
R3013 2.4k
R3014 3.9k
C3027 0.047
R3015 3.9k
R3016 56
R3017 56
R3018 56
R3019 56
R3020 1k
C3028 270p
L3012 NQR0006-001X
IC3003 TLC2940IPW
VCO
R3046 2.2k
C3056 1
R3047
C3058
C3057 0.01
R3041 560
R3042 560
C3051 0.1
IC3002 JCY0136
C3052 0.001
C3054
R3043 560
C3053 0.047
R3044 3.9k
L3013 NQR0006-001X
C3061 1
IC3006 JCY0134
C3063 0.1
C3062 0.1
C3064 0.01
IC3007 SN74HC2G53T
1
2
3
4
5
A
B
C
D
E
F
G
H

※ NO WEAR

y10196001a_rev0

4.8 PRE/REC SCHEMATIC DIAGRAM

NOTES : ● *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
● *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



0 1 MAIN [PRE/REC]
TO VTR CPU
HID3
HID1
PBH
RECH
MONI_CHG
TL3501
JIG CONN.
CN105
ENV_OUT 15
ATFI 14
TO CAM DSP
DUMP_CTL
ATF_GAIN
AGC_GAIN
RECCADJ
TO DV MAIN
REC_CTL
VREF_1.1
AGC_OUT
VRB_AGC
VRB_ATF
ATFI
REF_CLK
REC_DATA
REC_CLK
TO REG
REG_4.8V
REG_3V
REG_2.5V
GND
L3501 NQR0129-002X
L3502 10µ
L3503 NQR0006-001X
L3504 NQR0006-001X
L3505 NQR0006-001X
C3501 10/6.3
C3502 10/6.3
C3503 10/6.3
IC3501
JCY0132
C3516 0.047
C3515 0.047
C3514 0.047
C3513 0.1
C3512 0.1
C3511 0.01
R3508 22k
C3527 220p
C3517 0.01
C3518 0.01
C3519 0.001
R3509 ※
R3510 ※
C3520 0.01
C3521 0.1
C3522 4.7
C3523 0.01
C3524 0.01
C3525 4.7
PB_MONI
DCS_C3
DCS_C2
DCS_C1
R_CTL
VCC5
REC_H
PB_H
HID1
HID2
HID3
VDD2.8
DUMP
PBIN_R
HEAD_GND
LOGIC
Dumping
DC Servo
6dB
PB_OUT
AGC_IN
AGC_CTL
AGC_DET
PB_GND
AGC_OUT
AGC_BUFF_IN
REG_1.1V
AGC_BUFF_OUT
VRB_AGC
MAIN_GND
ATF_GAIN
VCA_OUT
ATF_IN
VRB_ATF
ATF_OUT
Typ:-1.3dB
LPF
AGC
Typ:7.8dB
REG
BIAS
10.3dB
REG
10dB
VCA
Typ:24dB
BPF
BIAS
REG
12dB
F0 Auto
F.F.
REC
REC_MONI
10dB
10dB
30dB
30dB
30dB
HEAD_GND
DX3
X3
Y3
DY3
HEAD_GND
DX2
X2
Y2
DY2
HEAD_GND
DX1
X1
Y1
DY1
HEAD_GND
R3507 240
R3506 240
R3505 240
R3504 240
TO HEAD
CN110
8 GND[P/R_GND]
7 2S
6 2F
5 GND[P/R_GND]
4 GND[P/R_GND]
3 1S
2 1F
1 GND[P/R_GND]
ATF_GND
F0_EVR
PB_GND
TC
ADREF
REF_CLK
REC_DATA
REC_GND
REC_CLK
REC_GAIN
VCC3
MONI_CHG
HEAD_VCC
REC_R
HEAD_GND
HEAD_GND
C3526 0.01
R3501 470
C3504 0.047
C3505 0.022
C3506 1
C3507 0.01
R3502 100k
C3508 0.01
C3509 0.01
C3510 0.1
R3503 1k
R3522 0Ω
R3521 0Ω

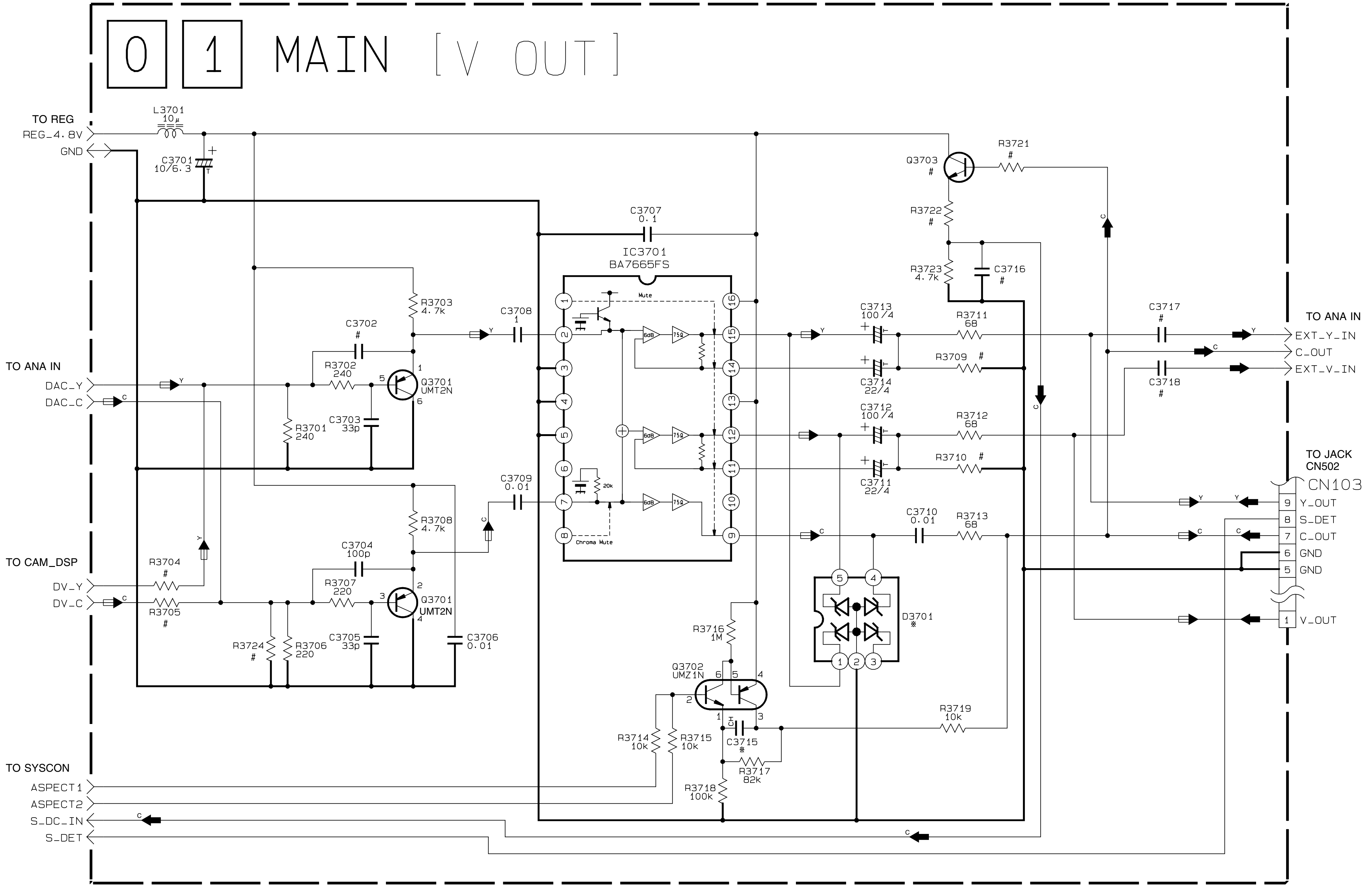
※ NO WEAR

y20126001a_rev0

4.9 V OUT SCHEMATIC DIAGRAM

NOTES : ● *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*

● *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



0 1 MAIN [V OUT]
TO REG
REG_4.8V
GND
L3701 10μ
C3701 10/6.3
TO ANA IN
DAC_Y
DAC_C
TO CAM_DSP
DV_Y
DV_C
TO SYSCON
ASPECT1
ASPECT2
S_DC_IN
S_DET
R3701 240
R3702 240
C3702 #
R3703 4.7k
C3703 33p
Q3701 UMT2N
R3704 #
R3705 #
R3706 220
R3707 220
C3704 100p
R3708 4.7k
C3705 33p
C3706 0.01
R3724 #
C3707 0.1
C3708 1
C3709 0.01
IC3701 BA7665FS
Mute
Chroma Mute
6dB
75Ω
20k
C3713 100/4
C3714 22/4
C3712 100/4
C3711 22/4
R3711 68
R3709 #
R3712 68
R3710 #
C3710 0.01
R3713 68
Q3703 #
R3721 #
R3722 #
R3723 4.7k
C3716 #
C3717 #
C3718 #
D3701 ※
R3716 1M
Q3702 UMZ1N
C3715 ※
R3714 10k
R3715 10k
R3717 82k
R3718 100k
R3719 10k
TO ANA IN
EXT_Y_IN
C_OUT
EXT_V_IN
TO JACK CN502
CN103
9 Y_OUT
8 S_DET
7 C_OUT
6 GND
5 GND
1 V_OUT
Y
C

※ NO WEAR

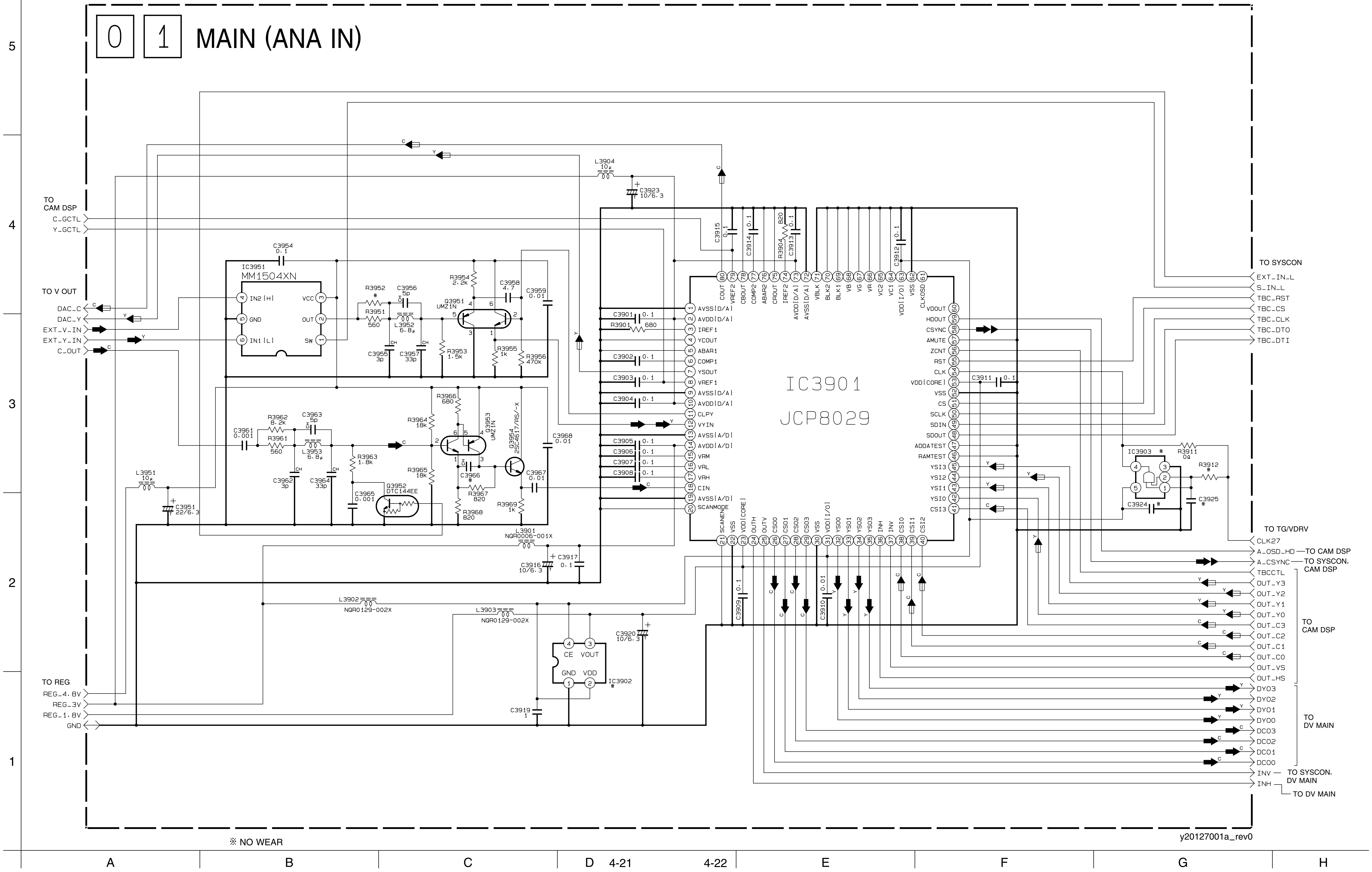
y30123001a_rev0

#: EXCHANGE PARTS LIST

	With ANALOG INPUT	Without ANALOG INPUT
Q3703	2SC4617/RS/-X	※
R3704	※	0Ω
R3705	※	0Ω
R3709	100k	※
R3710	100k	※
R3721	100	※
R3722	4.7k	※
R3724	※	3.9k
C3702	100p	150p
C3716	0.01	※
C3717	1	※
C3718	1	※

4.10 ANA IN SCHEMATIC DIAGRAM [GR-DVL915U]

NOTES :
- For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".
- The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



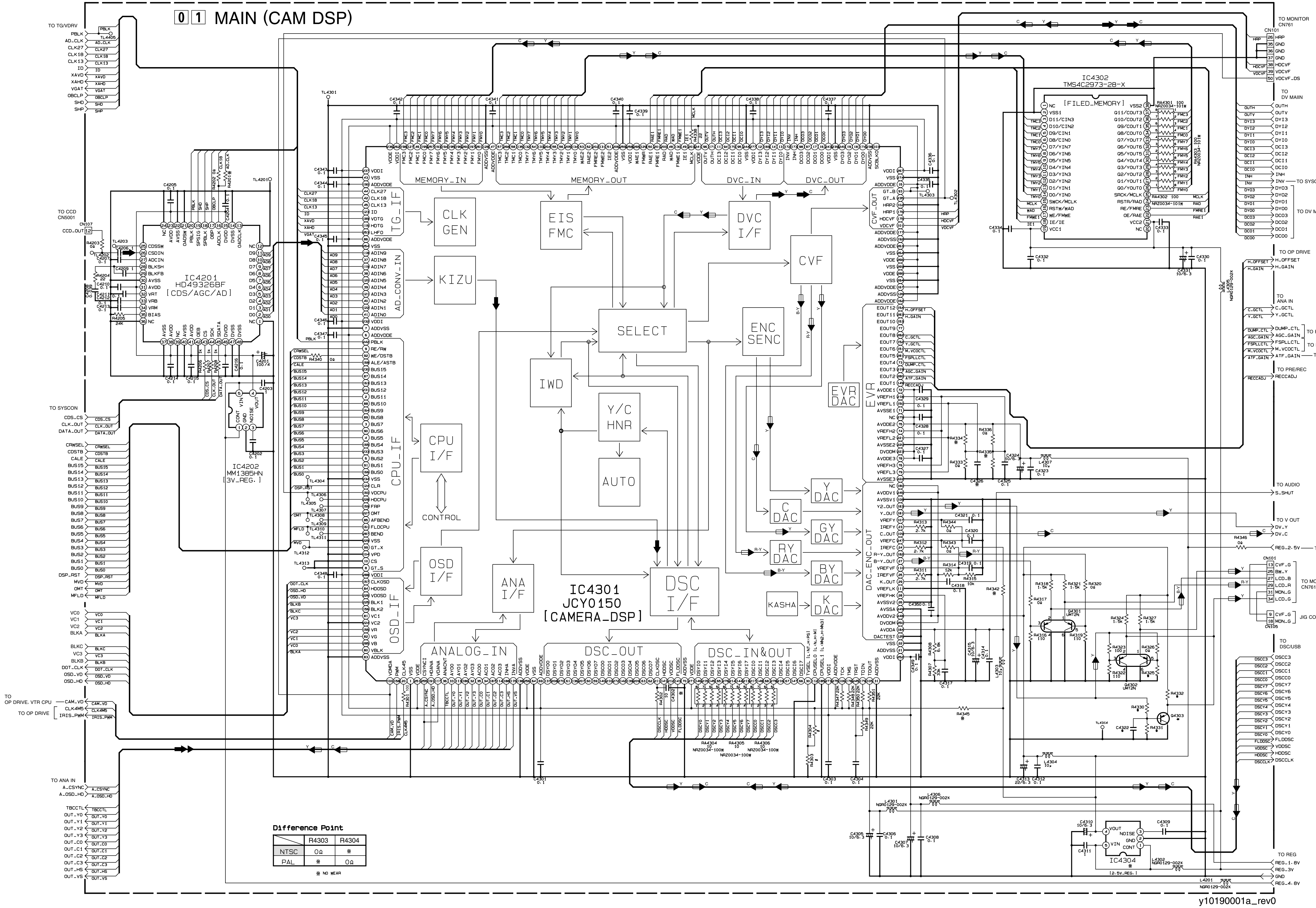
0 1 MAIN (ANA IN)
TO CAM DSP
C_GCTL
Y_GCTL
TO V OUT
DAC_C
DAC_Y
EXT_V_IN
EXT_Y_IN
C_OUT
TO REG
REG_4.8V
REG_3V
REG_1.8V
GND
IC3951
MM1504XN
IN2(H)
GND
IN1(L)
VCC
OUT
SW
C3954 0.1
R3952 ※
C3956 5p
R3951 560
L3952 6.8μ
C3955 3p
C3957 33p
R3953 1.5k
R3954 2.2k
Q3951 UMZ1N
C3958 4.7
C3959 0.01
R3955 1k
R3956 470k
C3961 0.001
R3962 8.2k
R3961 560
C3963 5p
L3953 6.8μ
C3962 3p
C3964 33p
R3963 1.8k
C3965 0.001
Q3952 DTC144EE
R3964 18k
R3965 18k
R3966 680
Q3953 UMZ1N
Q3954 2SC4617/RS/-X
C3966 ※
R3967 820
R3968 820
R3969 1k
C3967 0.01
C3968 0.01
L3951 10μ
C3951 22/6.3
L3901 NQR0006-001X
C3916 10/6.3
C3917 0.1
L3902 NQR0129-002X
L3903 NQR0129-002X
L3904 10μ
C3923 10/6.3
IC3902 ※
CE
VOUT
GND
VDD
C3919 1
C3920 10/6.3
IC3901
JCP8029
C3901 0.1
R3901 680
C3902 0.1
C3903 0.1
C3904 0.1
C3905 0.1
C3906 0.1
C3907 0.1
C3908 0.1
C3915 0.1
C3914 0.1
R3904 820
C3913 0.1
C3912 0.1
C3911 0.1
C3909 0.1
C3910 0.01
1 AVSS(D/A)
2 AVDD(D/A)
3 IREF1
4 YCOUT
5 ABAR1
6 COMP1
7 YSOUT
8 VREF1
9 AVSS(D/A)
10 AVDD(D/A)
11 CLPY
12 VYIN
13 AVSS(A/D)
14 AVDD(A/D)
15 VRM
16 VRL
17 VRH
18 CIN
19 AVSS(A/D)
20 SCANMODE
21 SCANEN
22 VSS
23 VDD(CORE)
24 OUTH
25 OUTV
26 CSO0
27 CSO1
28 CSO2
29 CSO3
30 VSS
31 VDD(I/O)
32 YSO0
33 YSO1
34 YSO2
35 YSO3
36 INH
37 INV
38 CSI0
39 CSI1
40 CSI2
41 CSI3
42 YSI0
43 YSI1
44 YSI2
45 YSI3
46 RAMTEST
47 ADDATEST
48 SDOUT
49 SDIN
50 SCLK
51 CS
52 VSS
53 VDD(CORE)
54 CLK
55 RST
56 ZCNT
57 AMUTE
58 CSYNC
59 HDOUT
60 VDOUT
61 CLKOSD
62 VSS
63 VDD(I/O)
64 VC1
65 VC2
66 VR
67 VG
68 VB
69 BLK1
70 BLK2
71 VBLK
72 AVSS(D/A)
73 AVDD(D/A)
74 IREF2
75 CROUT
76 ABAR2
77 COMP2
78 CBOUT
79 VREF2
80 COUT
IC3903 ※
R3911 0Ω
R3912 ※
C3924 ※
C3925 ※
TO SYSCON
EXT_IN_L
S_IN_L
TBC_RST
TBC_CS
TBC_CLK
TBC_DTO
TBC_DTI
TO TG/VDRV
CLK27
A_OSD_HD — TO CAM DSP
A_CSYNC — TO SYSCON, CAM DSP
TBCCTL
OUT_Y3
OUT_Y2
OUT_Y1
OUT_Y0
OUT_C3
OUT_C2
OUT_C1
OUT_C0
OUT_VS
OUT_HS
TO CAM DSP
DYO3
DYO2
DYO1
DYO0
DCO3
DCO2
DCO1
DCO0
TO DV MAIN
INV — TO SYSCON, DV MAIN
INH — TO DV MAIN
A
B
C
D
E
F
G
H
1
2
3
4
5

※ NO WEAR

y20127001a_rev0

4.11 CAM DSP SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



01 MAIN (CAM DSP)
IC4301
JCY0150
[CAMERA_DSP]
IC4201
HD49326BF
[CDS/AGC/AD]
IC4202
MM1385HN
[3V_REG.]
IC4302
TMS4C2973-28-X
[FILED_MEMORY]
IC4304
[2.5V_REG.]
MEMORY_IN
MEMORY_OUT
DVC_IN
DVC_OUT
TG_IF
AD_CONV_IN
CPU_IF
OSD_IF
ANALOG_IN
DSC_OUT
DSC_IN&OUT
CVF_OUT
EVR
DAC_ENC_OUT
CLK GEN
KIZU
EIS FMC
SELECT
DVC I/F
CVF
ENC SENC
IWD
Y/C HNR
AUTO
CPU I/F
CONTROL
OSD I/F
ANA I/F
DSC I/F
EVR DAC
Y DAC
C DAC
GY DAC
RY DAC
BY DAC
K DAC
KASHA
TO TG/VDRV
TO CCD CN5001
TO SYSCON
TO OP DRIVE, VTR CPU
TO OP DRIVE
TO ANA IN
TO MONITOR CN761
TO DV MAIIN
TO SYSCON, DV MAIN
TO DV MAIN
TO OP DRIVE
TO ANA IN
TO PRE/REC
TO DV MAIN
TO PRE/REC
TO AUDIO
TO V OUT
TO REG
TO MONITOR CN761
JIG CONN.
TO DSC/USB
TO REG
y10190001a_rev0
A
B
C
D
E
F
G
H
1
2
3
4
5

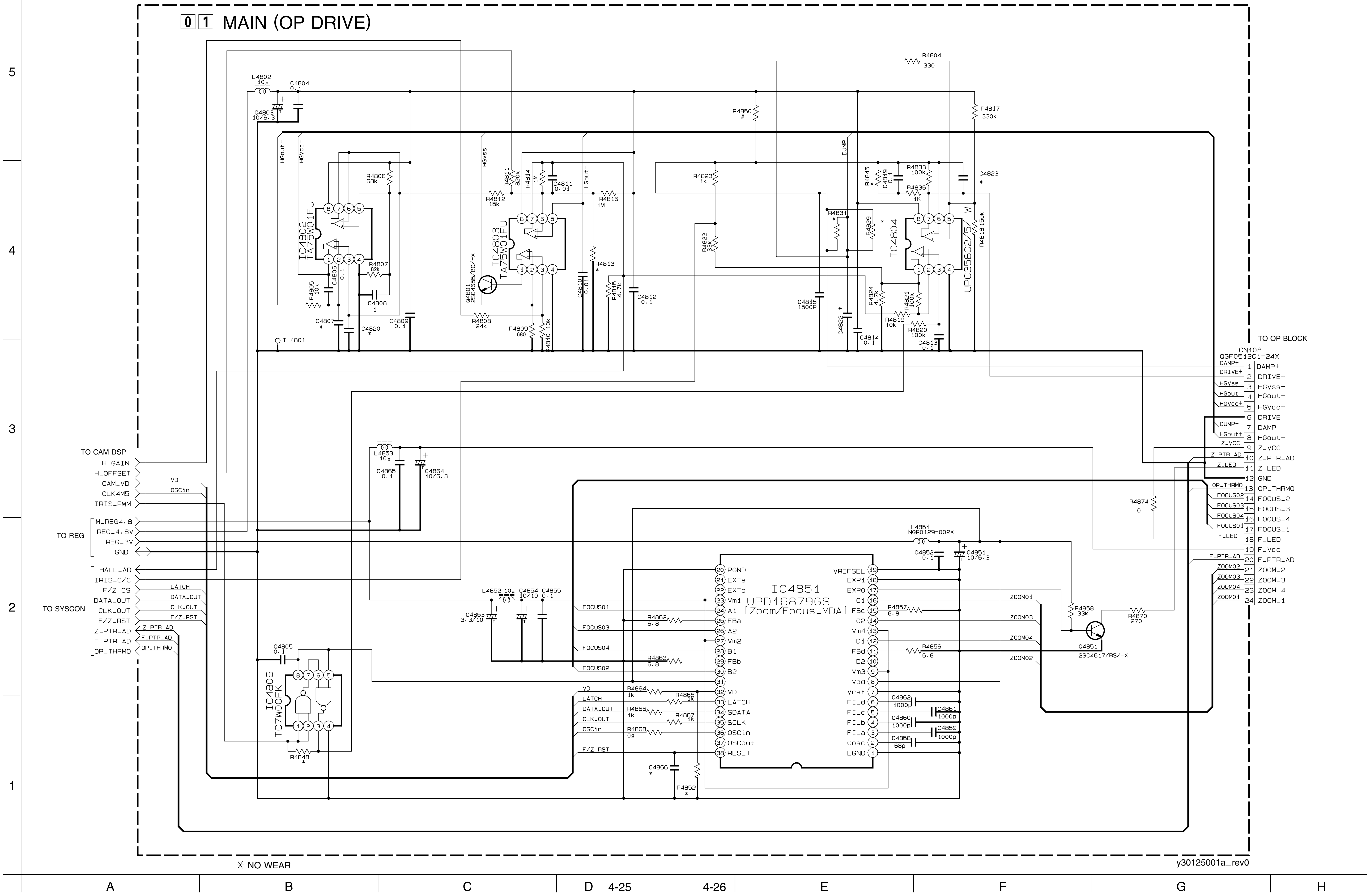
Difference Point

	R4303	R4304
NTSC	0Ω	※
PAL	※	0Ω

※ NO MEAR

4.12 OP DRIVE SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



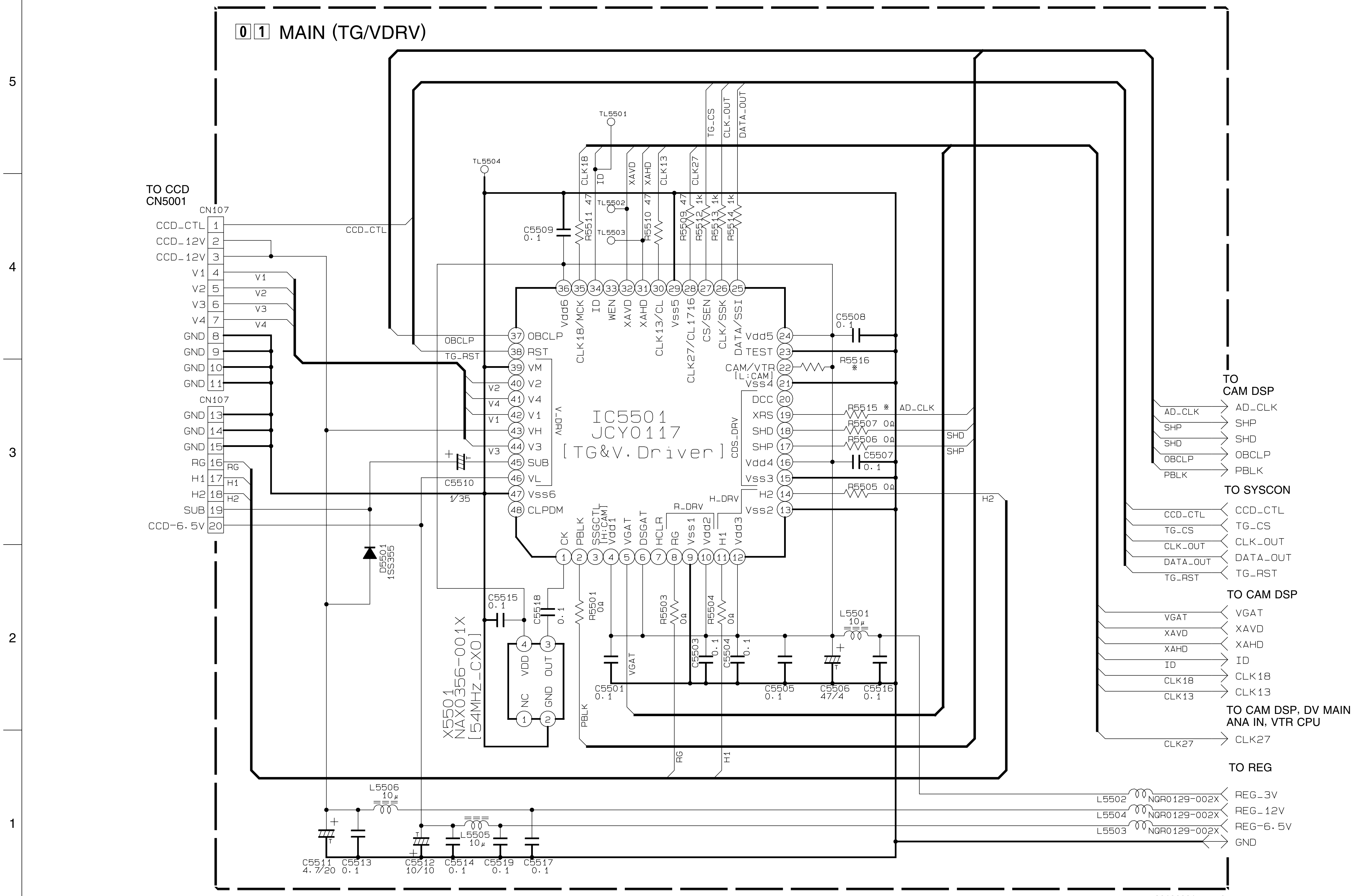
01 MAIN (OP DRIVE)
L4802 10μ
C4804 0.1
C4803 10/6.3
HGout+
HGVcc+
R4806 68k
IC4802 TA75W01FU
C4806 0.1
R4807 82k
R4805 10k
C4808 1
C4807 *
C4820 *
C4809 0.1
TL4801
HGVss-
R4811 820k
R4814 1M
C4811 0.01
HGout-
R4812 15k
R4816 1M
IC4803 TA75W01FU
Q4801 2SC4655/BC/-X
R4813 *
C4810 0.01
R4815 4.7k
C4812 0.1
R4808 24k
R4809 680
R4810 10k
R4804 330
R4850 #
R4817 330k
DUMP-
R4823 1k
R4845 *
C4819 0.1
R4833 100k
R4836 1K
C4823 *
R4831 *
R4829 *
IC4804 UPC358G2/S-W
R4818 150k
R4822 33k
C4815 1500P
C4822 *
R4824 4.7k
R4821 100k
R4819 10k
R4820 100k
C4814 0.1
C4813 0.1
TO OP BLOCK
CN108 QGF0512C1-24X
1 DAMP+
2 DRIVE+
3 HGVss-
4 HGout-
5 HGVcc+
6 DRIVE-
7 DAMP-
8 HGout+
9 Z_VCC
10 Z_PTR_AD
11 Z_LED
12 GND
13 OP_THRMO
14 FOCUS_2
15 FOCUS_3
16 FOCUS_4
17 FOCUS_1
18 F_LED
19 F_Vcc
20 F_PTR_AD
21 ZOOM_2
22 ZOOM_3
23 ZOOM_4
24 ZOOM_1
TO CAM DSP
H_GAIN
H_OFFSET
CAM_VD
CLK4M5
IRIS_PWM
VD
OSCin
TO REG
M_REG4.8
REG_4.8V
REG_3V
GND
TO SYSCON
HALL_AD
IRIS_O/C
F/Z_CS
DATA_OUT
CLK_OUT
F/Z_RST
Z_PTR_AD
F_PTR_AD
OP_THRMO
LATCH
L4853 10μ
C4865 0.1
C4864 10/6.3
R4874 0
L4851 NQR0129-002X
C4852 0.1
C4851 10/6.3
L4852 10μ
C4854 10/10
C4855 0.1
C4853 3.3/10
C4805 0.1
IC4806 TC7W00FK
R4848 *
IC4851 UPD16879GS [Zoom/Focus_MDA]
PGND
EXTa
EXTb
Vm1
A1
FBa
A2
Vm2
B1
FBb
B2
VD
LATCH
SDATA
SCLK
OSCin
OSCout
RESET
VREFSEL
EXP1
EXP0
C1
FBc
C2
Vm4
D1
FBd
D2
Vm3
Vdd
Vref
FILd
FILc
FILb
FILa
Cosc
LGND
FOCUS01
FOCUS03
FOCUS04
FOCUS02
R4862 6.8
R4863 6.8
R4864 1k
R4865 1k
R4866 1k
R4867 1k
R4868 0Ω
C4866 *
R4852 *
R4857 6.8
R4856 6.8
C4862 1000p
C4861 1000p
C4860 1000p
C4859 1000p
C4858 68p
ZOOM01
ZOOM03
ZOOM04
ZOOM02
R4858 33k
R4870 270
Q4851 2SC4617/RS/-X
A
B
C
D
E
F
G
H
1
2
3
4
5

※ NO WEAR

y30125001a_rev0

4.13 TG/VDRV SCHEMATIC DIAGRAM

NOTES :
- For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".
- The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



5
4
3
2
1
01 MAIN (TG/VDRV)
TO CCD
CN5001
CN107
CCD_CTL 1
CCD_12V 2
CCD_12V 3
V1 4
V2 5
V3 6
V4 7
GND 8
GND 9
GND 10
GND 11
CN107
GND 13
GND 14
GND 15
RG 16
H1 17
H2 18
SUB 19
CCD-6.5V 20
IC5501
JCY0117
[TG&V.Driver]
V_DRV
CDS_DRV
37 OBCLP
38 RST
39 VM
40 V2
41 V4
42 V1
43 VH
44 V3
45 SUB
46 VL
47 Vss6
48 CLPDM
36 Vdd6
35 CLK18/MCK
34 ID
33 WEN
32 XAVD
31 XAHD
30 CLK13/CL
29 Vss5
28 CLK27/CL1716
27 CS/SEN
26 CLK/SSK
25 DATA/SSI
24 Vdd5
23 TEST
22 CAM/VTR [L:CAM]
21 Vss4
20 DCC
19 XRS
18 SHD
17 SHP
16 Vdd4
15 Vss3
14 H2
13 Vss2
1 CK
2 PBLK
3 SSGCTL [H:CAM]
4 Vdd1
5 VGAT
6 DSGAT
7 HCLR
8 RG
9 Vss1
10 Vdd2
11 H1
12 Vdd3
R_DRV
H_DRV
TL5501
TL5502
TL5503
TL5504
C5509 0.1
R5511 47
R5510 47
R5509 47
R5512 1k
R5513 1k
R5514 1k
CLK18
ID
XAVD
XAHD
CLK13
CLK27
TG_CS
CLK_OUT
DATA_OUT
CCD_CTL
OBCLP
TG_RST
C5508 0.1
R5516 ※
R5515 ※
AD_CLK
R5507 0Ω
R5506 0Ω
C5507 0.1
R5505 0Ω
SHD
SHP
H2
C5510 1/35
D5501 1SS355
C5515 0.1
C5518 0.1
X5501 NAX0356-001X [54MHz_CXO]
4 VDD
3 OUT
1 NC
2 GND
R5501 0Ω
R5503 0Ω
R5504 0Ω
C5503 0.1
C5504 0.1
C5501 0.1
C5505 0.1
C5506 47/4
C5516 0.1
L5501 10μ
VGAT
PBLK
RG
H1
L5506 10μ
L5505 10μ
C5511 4.7/20
C5513 0.1
C5512 10/10
C5514 0.1
C5519 0.1
C5517 0.1
TO CAM DSP
AD_CLK
SHP
SHD
OBCLP
PBLK
TO SYSCON
CCD_CTL
TG_CS
CLK_OUT
DATA_OUT
TG_RST
TO CAM DSP
VGAT
XAVD
XAHD
ID
CLK18
CLK13
TO CAM DSP, DV MAIN ANA IN, VTR CPU
CLK27
TO REG
L5502 NQR0129-002X REG_3V
L5504 NQR0129-002X REG_12V
L5503 NQR0129-002X REG-6.5V
GND
A
B
C
D
E
F
G
H

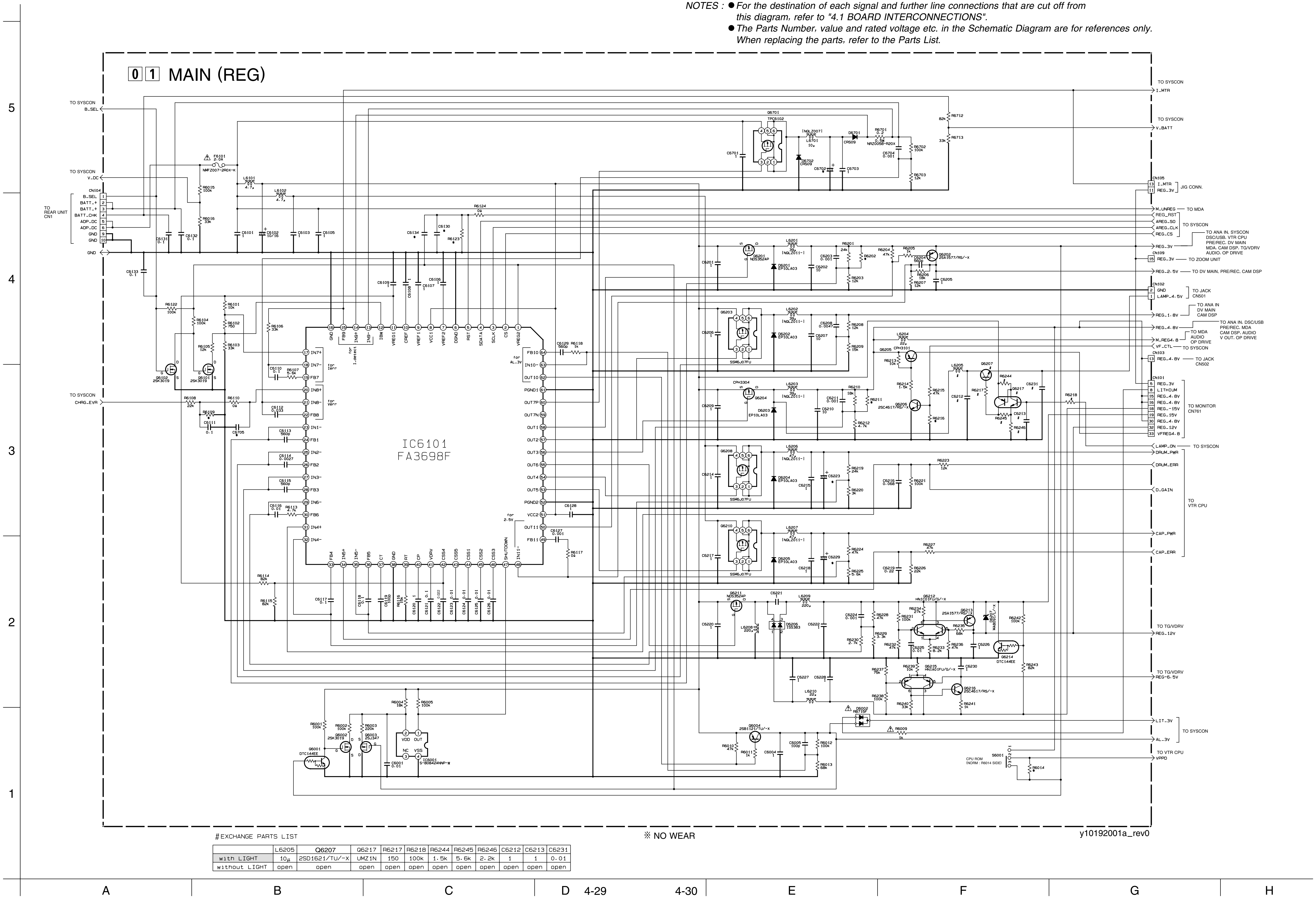
※ NO WEAR

y30126001a_rev0

4.14 REG SCHEMATIC DIAGRAM

NOTES : ● *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*

● *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



01 MAIN (REG)
IC6101 FA3698F
TO SYSCON B_SEL
TO SYSCON V_DC
TO REAR UNIT CN1
CN104
B_SEL
BATT_+
BATT_+
BATT_CHK
ADP_DC
ADP_DC
GND
GND
GND
TO SYSCON CHRG_EVR
TO SYSCON I_MTR
TO SYSCON V_BATT
CN105 I_MTR REG_3V JIG CONN.
M_UNREG TO MDA
REG_RST
AREG_SO
AREG_CLK
REG_CS
TO SYSCON
REG_3V
TO ANA IN. SYSCON DSC/USB. VTR CPU PRE/REC. DV MAIN MDA. CAM DSP. TG/VDRV AUDIO. OP DRIVE
CN109 REG_3V TO ZOOM UNIT
REG_2.5V TO DV MAIN. PRE/REC. CAM DSP
CN102 GND LAMP_4.5V TO JACK CN501
REG_1.8V TO ANA IN DV MAIN CAM DSP
REG_4.8V TO ANA IN. DSC/USB PRE/REC. MDA CAM DSP. AUDIO V OUT. OP DRIVE
M_REG4.8 TO MDA AUDIO OP DRIVE
VF_CTL TO SYSCON
CN103 REG_4.8V TO JACK CN502
CN101 REG_3V LITHIUM REG_4.8V REG_4.8V REG_-15V REG_15V REG_4.8V REG_12V VFREG4.8 TO MONITOR CN761
LAMP_ON TO SYSCON
DRUM_PWR
DRUM_ERR
D_GAIN
TO VTR CPU
CAP_PWR
CAP_ERR
TO TG/VDRV REG_12V
TO TG/VDRV REG-6.5V
LIT_3V
AL_3V
TO SYSCON
TO VTR CPU VPPD
CPU ROM (NORM : R6014 SIDE)
S6001
IC6001 S-80842ANNP-W
1
2
3
4
5
A
B
C
D
E
F
G
H

y10192001a_rev0

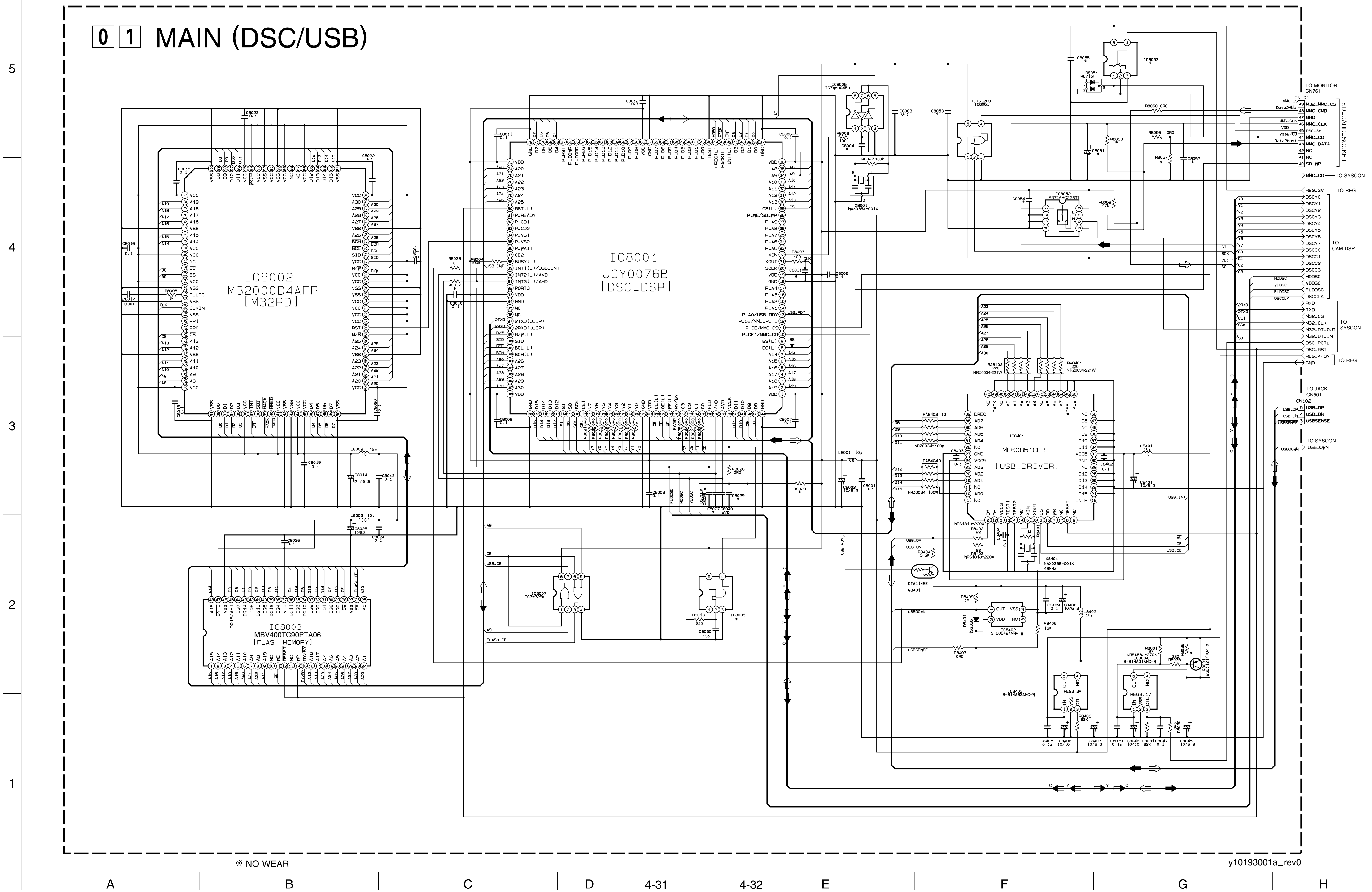
※ NO WEAR

#EXCHANGE PARTS LIST

	L6205	Q6207	Q6217	R6217	R6218	R6244	R6245	R6246	C6212	C6213	C6231
with LIGHT	10μ	2SD1621/TU/-X	UMZ1N	150	100k	1.5k	5.6k	2.2k	1	1	0.01
without LIGHT	open	open	open	open	open	open	open	open	open	open	open

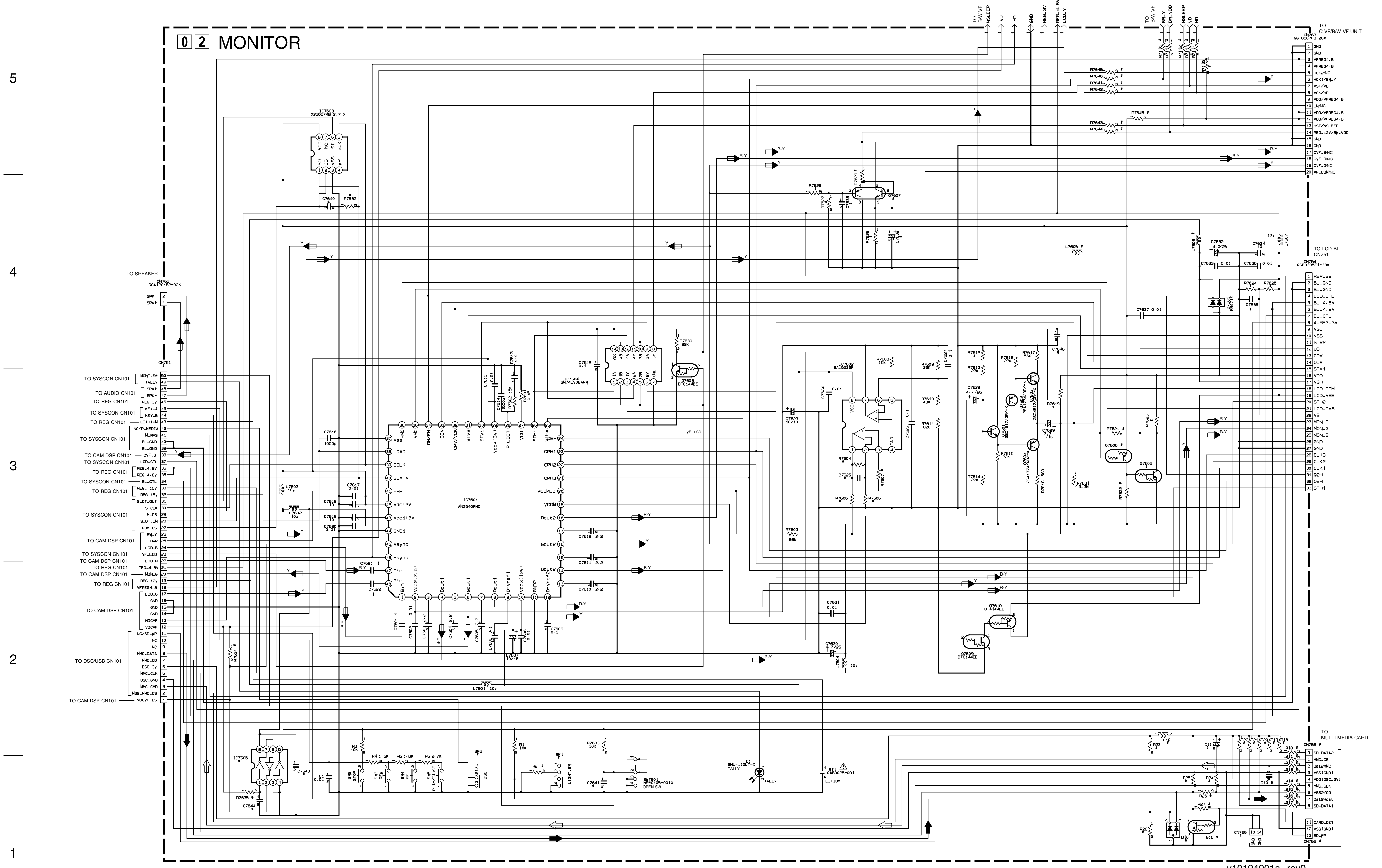
4.15 DSC/USB SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*


0 1 MAIN (DSC/USB)
IC8002
M32000D4AFP
[M32RD]
IC8001
JCY0076B
[DSC_DSP]
IC8003
MBV400TC90PTA06
[FLASH_MEMORY]
IC8401
ML60851CLB
[USB_DRIVER]
IC8006 TC7WHU04FU
IC8051 TC7S32FU
IC8053
IC8052 SN74AHC2G53T
IC8007 TC7W32FK
IC8005
IC8402 S-80842ANNP-W
IC8403 S-814A33AMC-W
IC8004 S-814A31AMC-W
X8001 NAX0354-001X
X8401 NAX0398-001X 48MHz
Q8401 DTA114EE
D8401 ISS355
RA8401 220 NRZ0034-221W
RA8402 220 NRZ0034-221W
TO MONITOR CN761
CN101
M32_MMC_CS
MMC_CMD
GND
MMC_CLK
DSC_3V
MMC_CD
MMC_DATA
NC
NC
SD_WP
SD_CARD_SOCKET
MMC_CD — TO SYSCON
REG_3V — TO REG
DSCY0
DSCY1
DSCY2
DSCY3
DSCY4
DSCY5
DSCY6
DSCY7
DSCC0
DSCC1
DSCC2
DSCC3
HDDSC
VDDSC
FLDDSC
DSCCLK
TO CAM DSP
RXD
TXD
M32_CS
M32_CLK
M32_DT_OUT
M32_DT_IN
DSC_PCTL
DSC_RST
TO SYSCON
REG_4.8V
GND
TO REG
TO JACK CN501
CN102
USB_DP
USB_DN
USBSENSE
TO SYSCON
USBDOWN
REG3.3V
REG3.1V
※ NO WEAR
y10193001a_rev0
A B C D E F G H
1 2 3 4 5

4.16 MONITOR SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



0 2 MONITOR
5
4
3
2
1
TO SPEAKER
TO SYSCON CN101
TO AUDIO CN101
TO REG CN101
TO CAM DSP CN101
TO DSC/USB CN101
TO B/W VF
TO C VF/B/W VF UNIT
TO LCD BL CN751
TO MULTI MEDIA CARD
IC7603 X25057MB-2.7-X
IC7601 AN2540FHQ
IC7604 SN74LV08APW
IC7602 BA10532F
IC7605
Q7607
Q7608 DTC144EE
Q7609 DTC144EE
Q7610 DTA144EE
Q7605
Q7606
CN761
CN763
CN764
CN766
SW7601 NSW0105-001X OPEN SW
D1 SML-310LT-K TALLY
BT1 QAB0025-001 LITIUM
STOP
REW
FF
PLAY/PAUSE
DSC
LIGHT SW
y10194001a_rev0

	R7110	R7111	R7112	R7113	R7114	R7115	Q7607	R7626	R7627	R7628	R7629	R7640	R7641	R7642	R7643	R7644	R7645	R7646	C7638	C7639
CVF MODEL	※	※	※	※	※	※	UMZ1N	18K	330K	220K	39K	0	0	0	0	0	0	0	2.2	10/10
B/W VF MODEL	0	0	0	0	0	0	※	※	※	※	※	※	※	※	※	※	※	※	※	※

	Q7605	Q7606	L7605	L7606	R7612	R7621	R7622	R7623	R7624	R7625	C7636
2.5inch MODEL	※	※	10	※	22K	0	※	※	※	※	※
3/3.5inch MODEL	DTA144EE	DTC144EE	※	10	6.8K	※	22K	22K	22K	22K	0.1

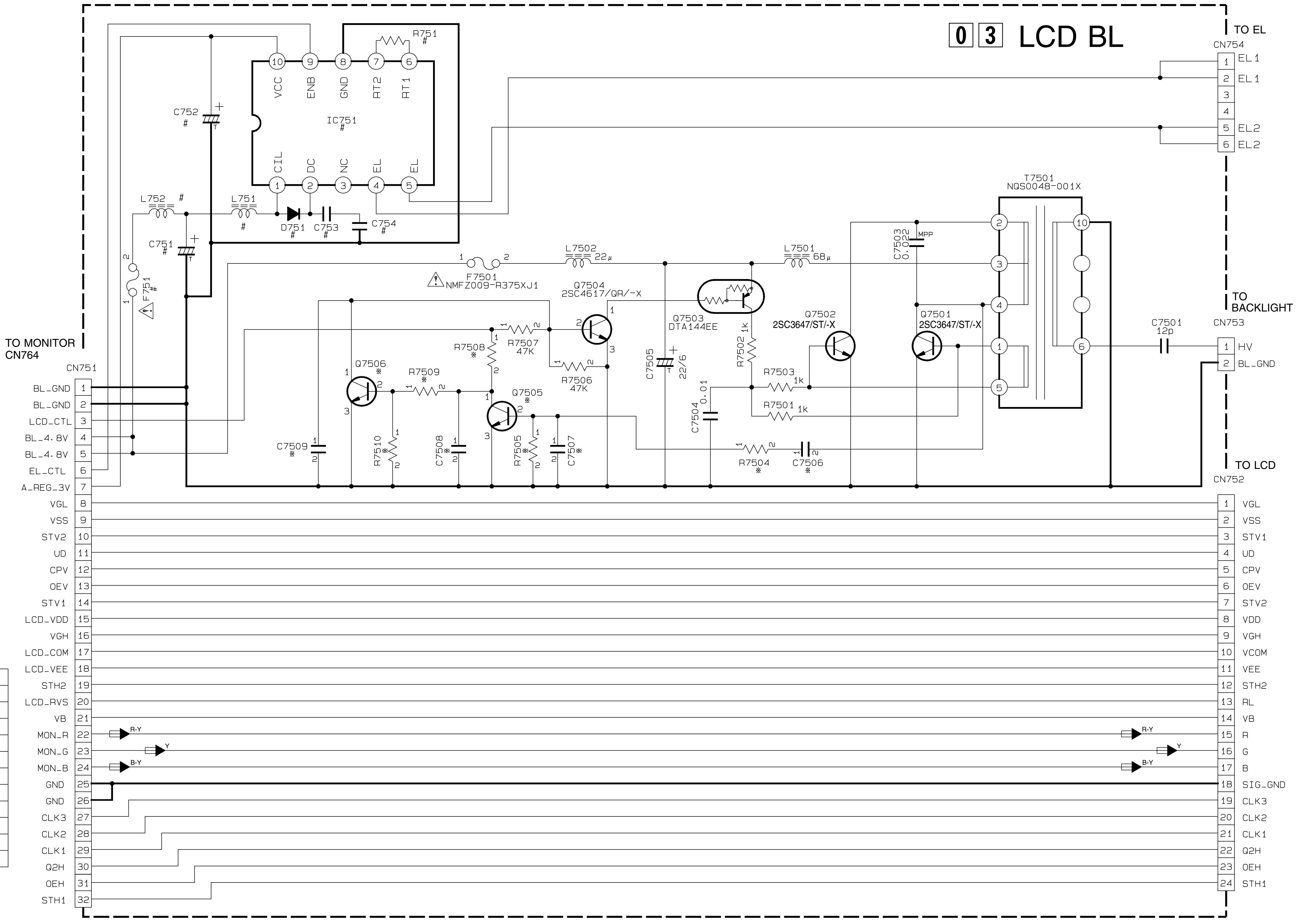
	R7634	CN761	CN766	SW6	R10	R11	R12	R13	R14	R15	R16	R17	R18	R19	R21	R22	R23	R24	R27	C11	L10
With DSC	※	QGF0508F1-50X	NNZ0052-001X	NSW0099-001X	0	0	0	0	0	0	0	0	47K	10K	10K	47K	100K	0	0	10/6.3	NQR0129-002X
Without DSC	0	QGF0508F1-40X	※	※	※	※	※	※	※	※	※	※	※	※	※	※	※	※	※	※	※

	R1	R2	SW1
With LIGHT	10K	10K	NSW0092-001X
Without LIGHT	※	※	※

※ NO WEAR

4.17 LCD BL SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



0 3 LCD BL
TO EL
CN754
1 EL1
2 EL1
3
4
5 EL2
6 EL2
IC751
#
10 VCC
9 ENB
8 GND
7 RT2
6 RT1
1 CIL
2 DC
3 NC
4 EL
5 EL
R751
#
C752
#
L752
#
L751
#
D751
#
C753
#
C754
#
C751
#
F751
#
TO MONITOR
CN764
CN751
1 BL_GND
2 BL_GND
3 LCD_CTL
4 BL_4.8V
5 BL_4.8V
6 EL_CTL
7 A_REG_3V
8 VGL
9 VSS
10 STV2
11 UD
12 CPV
13 OEV
14 STV1
15 LCD_VDD
16 VGH
17 LCD_COM
18 LCD_VEE
19 STH2
20 LCD_RVS
21 VB
22 MON_R
23 MON_G
24 MON_B
25 GND
26 GND
27 CLK3
28 CLK2
29 CLK1
30 Q2H
31 OEH
32 STH1
R-Y
Y
B-Y
F7501
NMFZ009-R375XJ1
L7502
22μ
Q7504
2SC4617/QR/-X
R7508
※
R7507
47K
R7506
47K
Q7506
※
R7509
※
Q7505
※
C7509
※
R7510
※
C7508
※
R7505
※
C7507
※
C7505
22/6
Q7503
DTA144EE
R7502
1k
C7504
0.01
R7503
1k
R7501
1k
R7504
※
C7506
※
L7501
68μ
C7503
0.022
MPP
Q7502
2SC3647/ST/-X
Q7501
2SC3647/ST/-X
T7501
NQS0048-001X
C7501
12p
TO BACKLIGHT
CN753
1 HV
2 BL_GND
TO LCD
CN752
1 VGL
2 VSS
3 STV1
4 UD
5 CPV
6 OEV
7 STV2
8 VDD
9 VGH
10 VCOM
11 VEE
12 STH2
13 RL
14 VB
15 R
16 G
17 B
18 SIG_GND
19 CLK3
20 CLK2
21 CLK1
22 Q2H
23 OEH
24 STH1

: EXCHANGE PARTS LIST

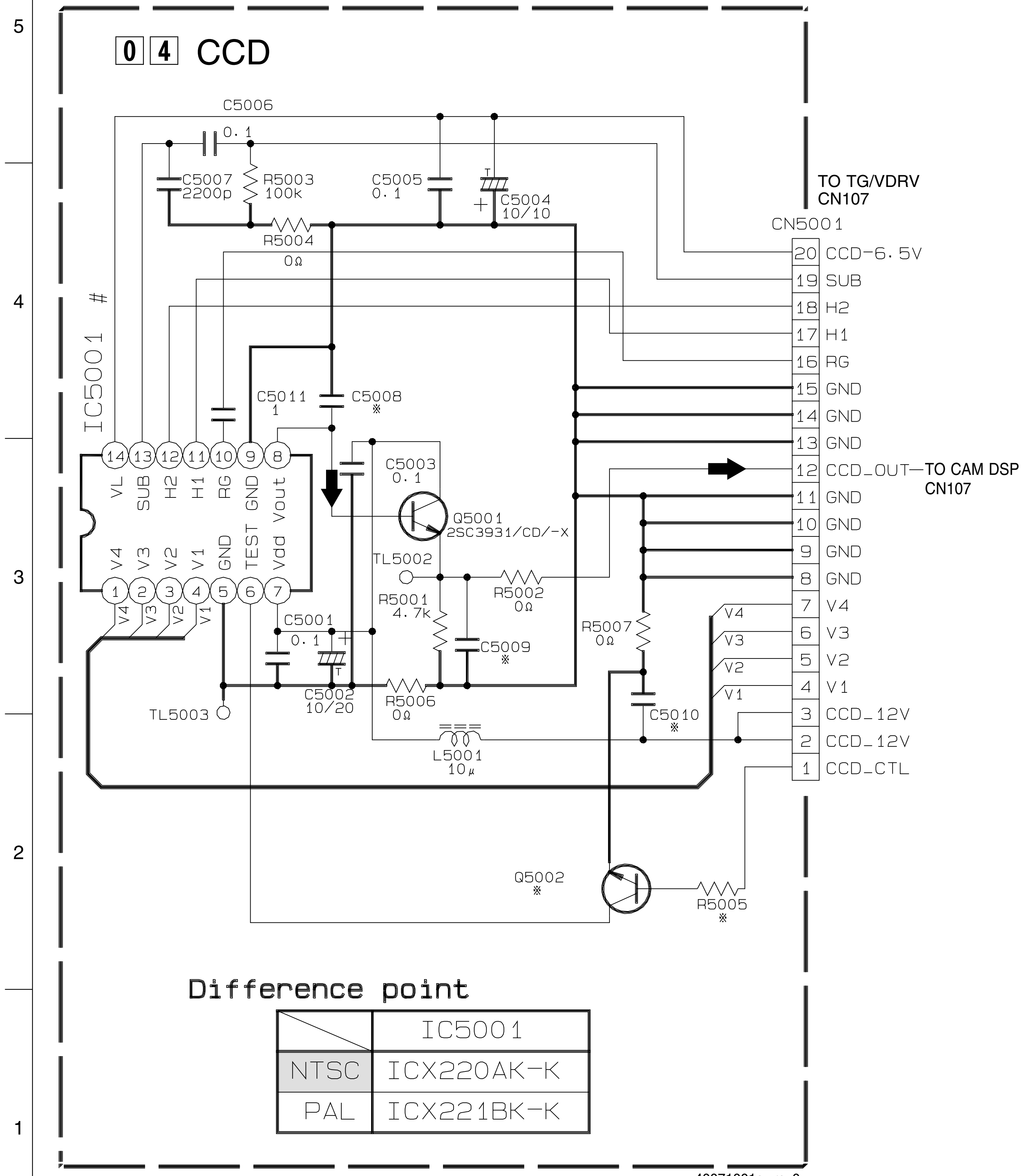
	With EL	Without EL
IC751	MIP805	※
F751	NMFZ007-R20X-K	※
D751	1SS376	※
L751	680	※
L752	10	※
R751	100K	※
C751	10/6.3	※
C752	10/6.3	※
C753	2200p	※
C754	2200p	※
CN754	QGF0505F2-06X	※

※ NO WEAR

y30127001a_rev0

4.18 CCD SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*


5
4
3
2
1
0 4 CCD
C5006
0.1
C5007
2200p
R5003
100k
C5005
0.1
C5004
10/10
R5004
0Ω
TO TG/VDRV
CN107
CN5001
20 CCD-6.5V
19 SUB
18 H2
17 H1
16 RG
15 GND
14 GND
13 GND
12 CCD_OUT
TO CAM DSP
CN107
11 GND
10 GND
9 GND
8 GND
7 V4
6 V3
5 V2
4 V1
3 CCD_12V
2 CCD_12V
1 CCD_CTL
IC5001 #
14 VL
13 SUB
12 H2
11 H1
10 RG
9 GND
8 Vout
1 V4
2 V3
3 V2
4 V1
5 GND
6 TEST
7 Vdd
C5011
1
C5008
※
C5003
0.1
Q5001
2SC3931/CD/-X
TL5002
R5001
4.7k
R5002
0Ω
C5009
※
R5007
0Ω
C5001
0.1
C5002
10/20
R5006
0Ω
TL5003
L5001
10μ
C5010
※
V4
V3
V2
V1
Q5002
※
R5005
※

Difference point

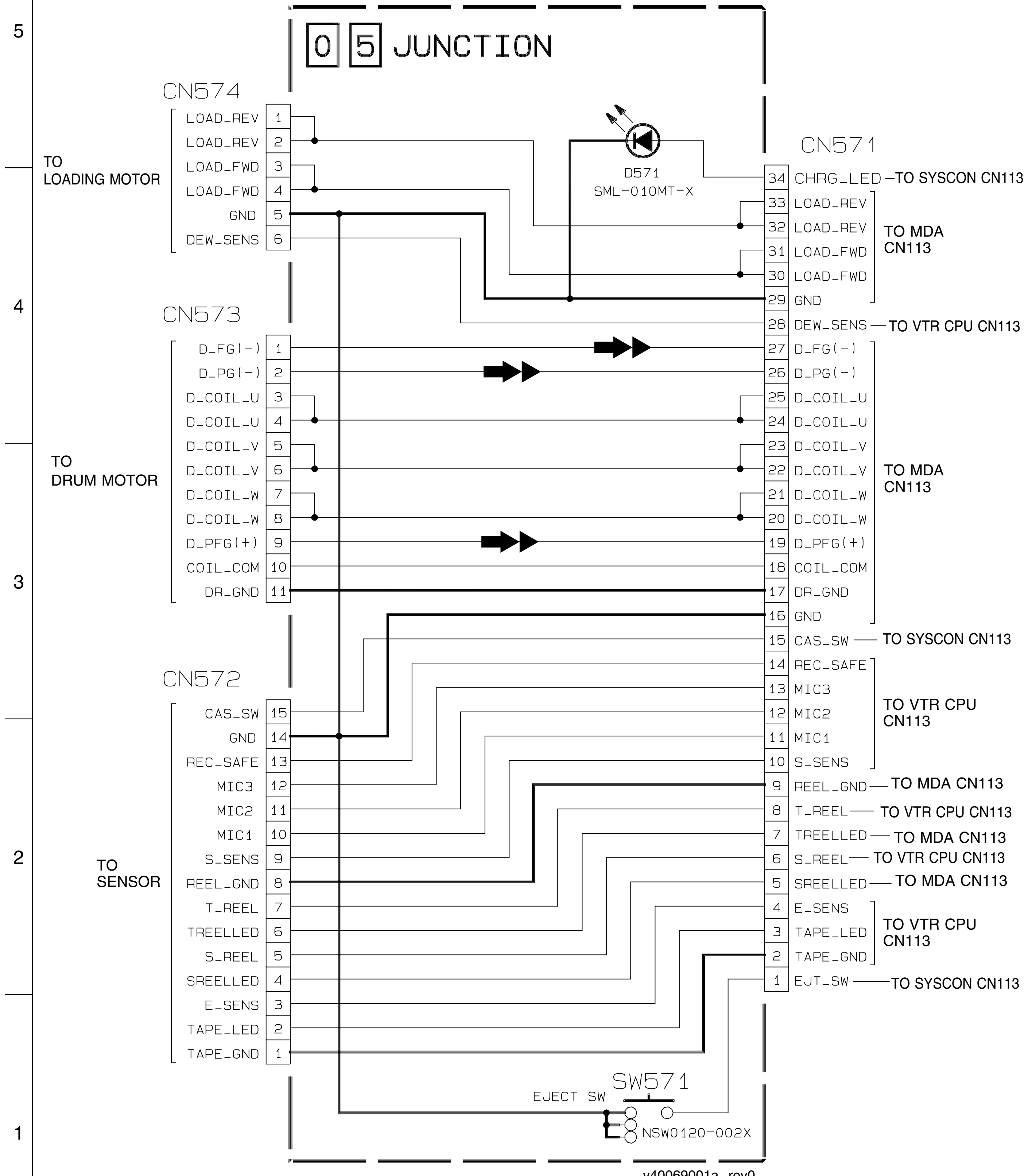
	IC5001
NTSC	ICX220AK-K
PAL	ICX221BK-K

※ NO WEAR

y40071001a_rev0

4.19 JUNCTION SCHEMATIC DIAGRAM

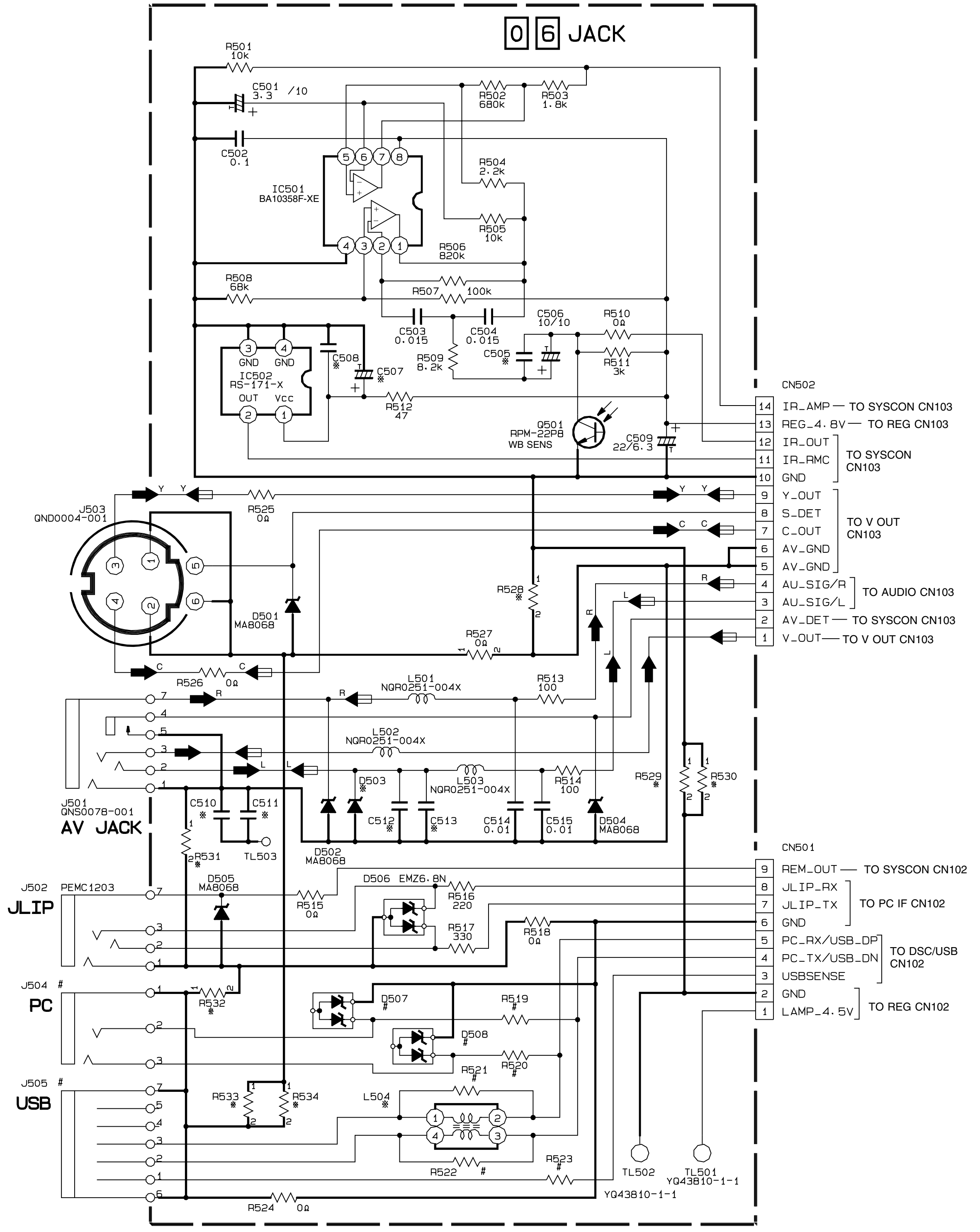
NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*


5
4
3
2
1
0 5 JUNCTION
TO LOADING MOTOR
CN574
1 LOAD_REV
2 LOAD_REV
3 LOAD_FWD
4 LOAD_FWD
5 GND
6 DEW_SENS
D571
SML-010MT-X
CN571
34 CHRG_LED
TO SYSCON CN113
33 LOAD_REV
32 LOAD_REV
31 LOAD_FWD
30 LOAD_FWD
29 GND
TO MDA
CN113
28 DEW_SENS
TO VTR CPU CN113
TO DRUM MOTOR
CN573
1 D_FG(-)
2 D_PG(-)
3 D_COIL_U
4 D_COIL_U
5 D_COIL_V
6 D_COIL_V
7 D_COIL_W
8 D_COIL_W
9 D_PFG(+)
10 COIL_COM
11 DR_GND
27 D_FG(-)
26 D_PG(-)
25 D_COIL_U
24 D_COIL_U
23 D_COIL_V
22 D_COIL_V
21 D_COIL_W
20 D_COIL_W
19 D_PFG(+)
18 COIL_COM
17 DR_GND
16 GND
TO MDA
CN113
15 CAS_SW
TO SYSCON CN113
14 REC_SAFE
13 MIC3
12 MIC2
11 MIC1
10 S_SENS
TO VTR CPU
CN113
9 REEL_GND
TO MDA CN113
8 T_REEL
TO VTR CPU CN113
7 TREELLED
TO MDA CN113
6 S_REEL
TO VTR CPU CN113
5 SREELLED
TO MDA CN113
4 E_SENS
3 TAPE_LED
2 TAPE_GND
TO VTR CPU
CN113
1 EJT_SW
TO SYSCON CN113
TO SENSOR
CN572
15 CAS_SW
14 GND
13 REC_SAFE
12 MIC3
11 MIC2
10 MIC1
9 S_SENS
8 REEL_GND
7 T_REEL
6 TREELLED
5 S_REEL
4 SREELLED
3 E_SENS
2 TAPE_LED
1 TAPE_GND
EJECT SW
SW571
NSW0120-002X

y40069001a_rev0

4.20 JACK SCHEMATIC DIAGRAM

NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



06 JACK
R501 10k
C501 3.3 /10
C502 0.1
R502 680k
R503 1.8k
IC501 BA10358F-XE
R504 2.2k
R505 10k
R506 820k
R508 68k
R507 100k
C503 0.015
C504 0.015
C506 10/10
R510 0Ω
R509 8.2k
C505 ※
R511 3k
GND GND
IC502 RS-171-X
OUT Vcc
C508 ※
C507 ※
R512 47
Q501 RPM-22P8 WB SENS
C509 22/6.3
CN502
14 IR_AMP — TO SYSCON CN103
13 REG_4.8V — TO REG CN103
12 IR_OUT
11 IR_RMC
10 GND
TO SYSCON CN103
9 Y_OUT
8 S_DET
7 C_OUT
6 AV_GND
5 AV_GND
TO V OUT CN103
4 AU_SIG/R
3 AU_SIG/L
TO AUDIO CN103
2 AV_DET — TO SYSCON CN103
1 V_OUT — TO V OUT CN103
J503 QND0004-001
R525 0Ω
D501 MA8068
R528 ※
R527 0Ω
R526 0Ω
L501 NQR0251-004X
R513 100
L502 NQR0251-004X
D503 ※
L503 NQR0251-004X
R514 100
R529 ※
R530 ※
J501 QNS0078-001
AV JACK
C510 ※
C511 ※
R531 ※
TL503
D502 MA8068
C512 ※
C513 ※
C514 0.01
C515 0.01
D504 MA8068
CN501
9 REM_OUT — TO SYSCON CN102
8 JLIP_RX
7 JLIP_TX
6 GND
TO PC IF CN102
5 PC_RX/USB_DP
4 PC_TX/USB_DN
3 USBSENSE
TO DSC/USB CN102
2 GND
1 LAMP_4.5V
TO REG CN102
J502 PEMC1203
JLIP
D505 MA8068
D506 EMZ6.8N
R515 0Ω
R516 220
R517 330
R518 0Ω
J504 #
PC
R532 ※
D507 #
R519 #
D508 #
R520 #
R521 #
J505 #
USB
R533 ※
R534 ※
L504 ※
R522 #
R523 #
TL502 YQ43810-1-1
TL501 YQ43810-1-1
R524 0Ω

※ NO WEAR

y40068001a_rev0

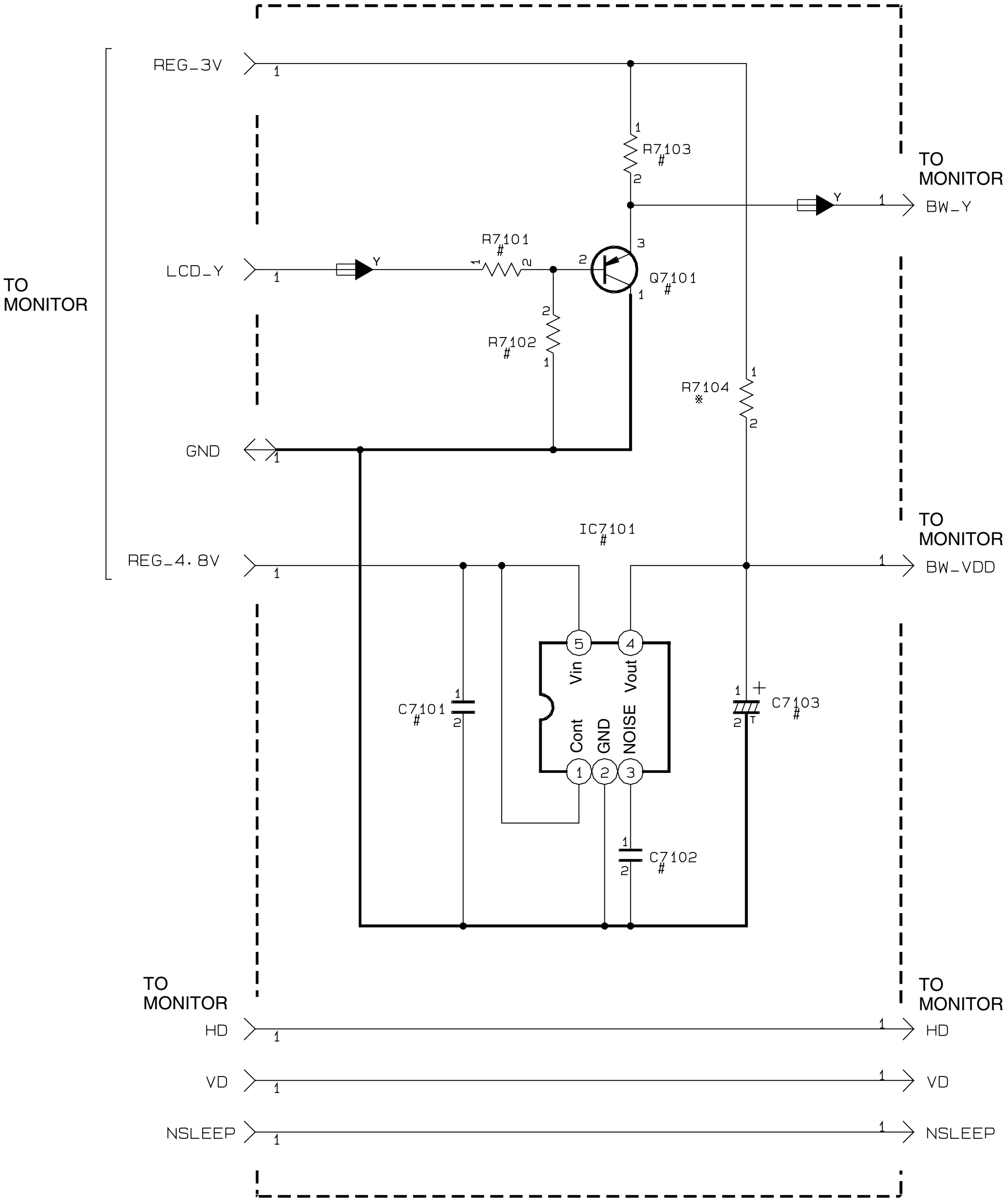
EXCHANGE PARTS LIST

	J504	J505	R519, R520	R521~R523	D507, D508
Without DSC	QNS0152-001	※	330	※	EMZ6.8N-X
With DSC	※	QNZ0497-001	※	0Ω	※

4.21 B/W VF SCHEMATIC DIAGRAM

NOTES : ● *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*

● *The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.*



TO MONITOR
REG_3V
LCD_Y
GND
REG_4.8V
R7103 #
R7101 #
R7102 #
R7104 ※
Q7101 #
IC7101 #
Vin
Vout
Cont
GND
NOISE
C7101 #
C7102 #
C7103 #
TO MONITOR
BW_Y
TO MONITOR
BW_VDD
TO MONITOR
HD
VD
NSLEEP
TO MONITOR
HD
VD
NSLEEP

y40070001a_rev0

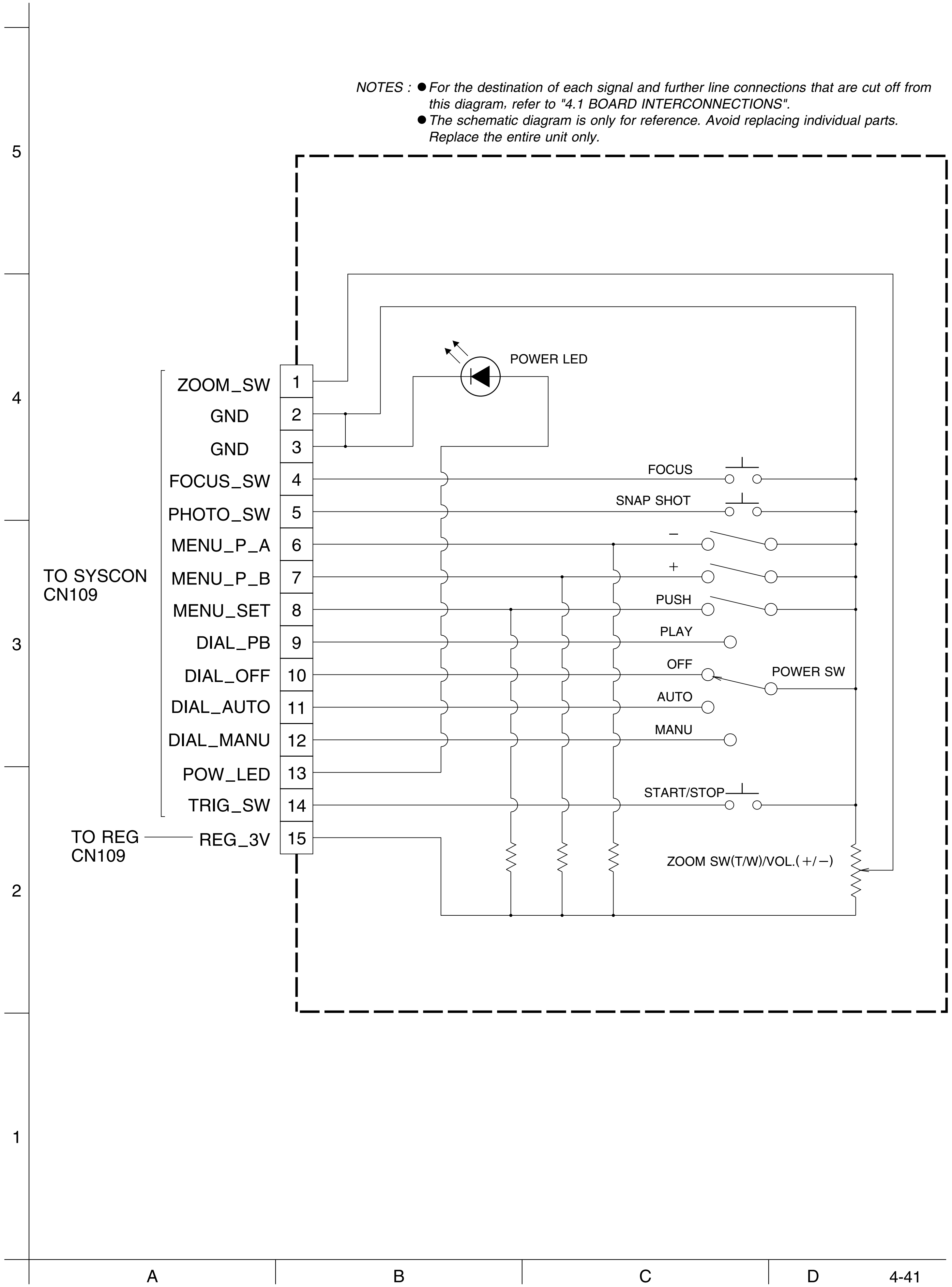
#: EXCHANGE PARTS LIST

	CVF MODEL	B/W VF MODEL
IC7101	※	MM1385EN
Q7101	※	2SA1774/QR/-X
R7101	※	5.6K
R7102	※	5.6K
R7103	※	10K
C7101	※	0.1
C7102	※	0.01
C7103	※	4.7/6.3

※ NO WEAR

4.22 ZOOM UNUT SCHEMATIC DIAGRAM

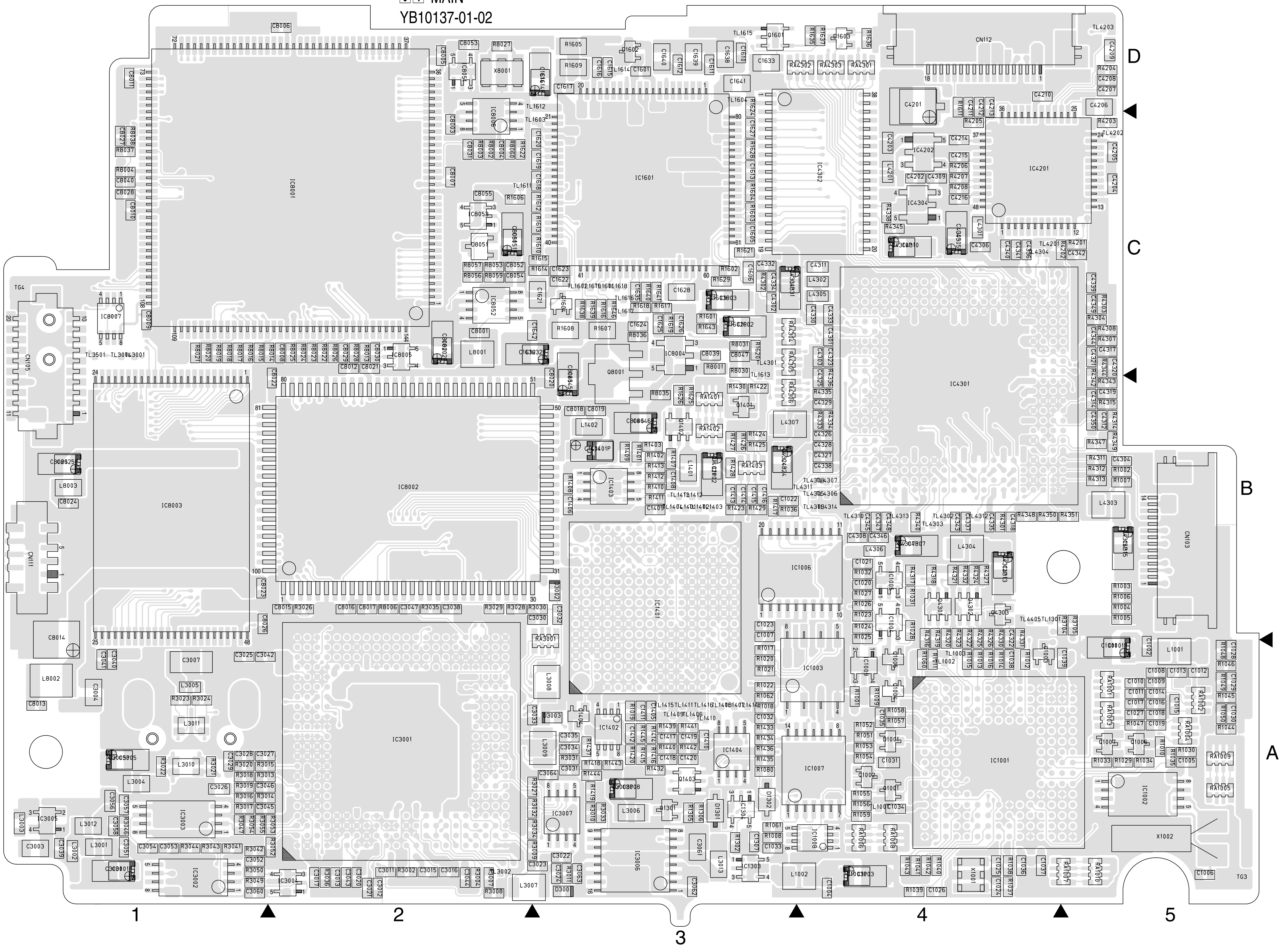
NOTES :
- *For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".*
- *The schematic diagram is only for reference. Avoid replacing individual parts. Replace the entire unit only.*


5
4
3
2
1
POWER LED
ZOOM_SW 1
GND 2
GND 3
FOCUS_SW 4
PHOTO_SW 5
MENU_P_A 6
MENU_P_B 7
MENU_SET 8
DIAL_PB 9
DIAL_OFF 10
DIAL_AUTO 11
DIAL_MANU 12
POW_LED 13
TRIG_SW 14
REG_3V 15
TO SYSCON CN109
TO REG CN109
FOCUS
SNAP SHOT
−
+
PUSH
PLAY
OFF
POWER SW
AUTO
MANU
START/STOP
ZOOM SW(T/W)/VOL.(+/−)
A
B
C
D

4.23 MAIN CIRCUIT BOARD

FOIL SIDE(B)

01 MAIN
YB10137-01-02


D
C
B
A
1
2
3
4
5
IC8001
IC8002
IC8003
IC8006
IC8007
IC8052
IC1601
IC4302
IC4201
IC4202
IC4304
IC4301
IC1401
IC1402
IC1403
IC1404
IC1006
IC1003
IC1007
IC1008
IC1001
IC1002
IC3001
IC3002
IC3003
IC3005
IC3006
IC3007
CN105
CN111
CN112
CN103
X8001
X1001
X1002
Q8001
L8001
L8002
L8003
L1001
L1002
L1401
L1402
L3001
L3004
L3005
L3006
L3007
L3008
L3009
L3010
L3011
L3012
L3013
L4303
L4304
L4307
C8014
C3007
TG4
TG3

COMPONENT PARTS LOCATION GUIDE <MAIN>

REF.NO.	LOCATION		
CAPACITOR			
C1001	B	C	5A
C1002	B	C	5A
C1003	B	C	4A
C1004	B	C	4A
C1005	B	C	5A
C1006	B	C	5A
C1007	B	C	3B
C1008	B	C	5A
C1009	B	C	5A
C1010	B	C	5A
C1011	B	C	5A
C1012	B	C	5A
C1013	B	C	5A
C1014	B	C	5A
C1015	B	C	5A
C1016	B	C	5A
C1017	B	C	5A
C1018	B	C	5A
C1019	B	C	5A
C1020	B	C	4B
C1021	B	C	4B
C1022	B	C	3B
C1023	B	C	3B
C1024	B	C	4A
C1025	B	C	4A
C1026	B	C	4A
C1027	B	C	5A
C1028	B	C	5A
C1029	B	C	5A
C1030	B	C	5A
C1031	B	C	4A
C1032	B	C	3A
C1033	B	C	3A
C1034	B	C	4A
C1035	B	C	4A
C1036	B	C	4A
C1037	B	C	4A
C1038	B	C	4A
C1039	B	C	5A
C1040	A	C	1B
C1041	A	C	1B
C1307	B	C	3A
C1401	B	C	3B
C1402	B	C	3B
C1405	B	C	3A
C1406	B	C	3B
C1408	B	C	3B
C1409	B	C	3B
C1410	B	C	3A
C1411	B	C	3A
C1412	B	C	3A
C1413	B	C	3B
C1414	B	C	3B
C1415	B	C	3B
C1416	B	C	3B
C1417	B	C	3A
C1418	B	C	3A
C1419	B	C	3A
C1420	B	C	3A
C1601	B	C	3D
C1602	B	C	3C
C1603	B	C	3C
C1605	B	C	3C
C1606	B	C	3C
C1607	A	C	3A
C1610	B	C	3D
C1611	B	C	3D
C1612	B	C	3D
C1613	B	C	3C
C1614	B	C	3D
C1615	B	C	3D
C1616	B	C	3D
C1617	B	C	3D
C1618	B	C	3C
C1619	B	C	3C
C1620	B	C	3C
C1621	B	C	3C
C1622	B	C	3C
C1623	B	C	3C
C1624	B	C	3C
C1625	B	C	3C
C1626	B	C	3C
C1627	B	C	3C
C1628	B	C	3C
C1632	B	C	3C
C1633	B	C	3D
C1635	B	C	3C
C1638	B	C	3D
C1639	B	C	3D
C1640	B	C	3D
C1641	B	C	3D
C1642	B	C	3C
C2001	A	C	4A
C2002	A	C	4A
C2003	A	C	4A
C2004	A	C	5A
C2005	A	C	5A
C2006	A	C	4A
C2007	A	C	4A
C2008	A	C	4A
C2009	A	C	4A
C2010	A	C	4A
C2011	A	C	4A
C2012	A	C	5A
C2013	A	C	4A
C2014	A	C	4A
C2015	A	C	4B
C2016	A	C	4A
C2017	A	C	4A
C2018	A	C	4A
C2019	A	C	4A
C2020	A	C	4A
C2021	A	C	4A
C2101	A	C	5A
C2102	A	C	5A
C2103	A	C	5A
C2104	A	C	5A
C2107	A	C	5A
C2108	A	C	5A
C2109	A	C	5A
C2110	A	C	5A
C2111	A	C	4A
C2112	A	C	5A
C2113	A	C	5A
C2114	A	C	5A
C2115	A	C	4A
C2116	A	C	5A
C2121	A	C	5A
C2122	A	C	5A
C2123	A	C	5B
C2124	A	C	5A
C2125	A	C	5B
C2126	A	C	5A
C2129	A	C	5A
C2130	A	C	5A
C2131	A	C	5A
C2132	A	C	5A
C2133	A	C	5B
C2134	A	C	5A
C2201	A	C	5A
C2202	A	C	5A
C3001	B	C	1A
C3003	B	C	1A
C3004	B	C	1A
C3005	B	C	1A
C3007	B	C	1A
C3008	B	C	3A
C3011	B	C	2A
C3012	B	C	2A
C3013	B	C	2A
C3015	B	C	2A
C3016	B	C	2A
C3017	B	C	2A
C3020	B	C	2A
C3021	B	C	2A
C3022	B	C	3A
C3023	B	C	3A
C3024	B	C	3A
C3025	B	C	1A
C3026	B	C	1A
C3027	B	C	2A
C3028	B	C	1A
C3029	B	C	1A
C3030	B	C	3B
C3031	B	C	3A
C3032	B	C	3B
C3033	B	C	3A
C3034	B	C	3A
C3035	B	C	3A
C3038	B	C	2B
C3039	B	C	1A
C3040	B	C	1A
C3041	B	C	1A
C3042	B	C	2A
C3043	B	C	2A
C3044	B	C	2A
C3045	B	C	2A
C3046	B	C	2A
C3047	B	C	2B
C3051	B	C	1A
C3052	B	C	1A
C3053	B	C	1A
C3054	B	C	1A
C3056	B	C	1A
C3057	B	C	1A
C3058	B	C	1A
C3060	B	C	1A
C3061	B	C	3A
C3062	B	C	3A
C3063	B	C	3A
C3064	B	C	3A
C3501	A	C	3C
C3502	A	C	3C
C3503	A	C	2D
C3504	A	C	2C
C3505	A	C	2C
C3506	A	C	2C
C3507	A	C	2C
C3508	A	C	2C
C3509	A	C	2C
C3510	A	C	2C
C3511	A	C	3C
C3512	A	C	3C
C3513	A	C	3C
C3514	A	C	3C
C3515	A	C	3C
C3516	A	C	3C
C3517	A	C	3C
C3518	A	C	3C
C3519	A	C	3C
C3520	A	C	2C
C3521	A	C	2C
C3522	A	C	2C
C3523	A	C	2C
C3524	A	C	2C
C3525	A	C	2C
C3526	A	C	2C
C3527	A	C	3C
C3701	A	C	1A
C3702	A	C	3A
C3703	A	C	3A
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C8405	A	C	5B
C8406	A	C	5B
C8407	A	C	5B
C8408	A	C	4B
C8409	A	C	4B
CONNECTOR			
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CN102	A	C	5B
CN103	B	C	5B
CN104	A	C	1B
CN105	B	C	1B
CN106	A	C	5A
CN107	A	C	4D
CN108	A	C	4C
CN109	A	C	1D
CN110	A	C	2D
CN111	B	C	1B
CN112	B	C	4D
CN113	A	C	3D
DIODE			
D1001	B	C	4A
D1002	A	C	1B
D1301	B	C	3A
D1302	B	C	3A
D1602	B	C	3D
D1603	B	C	4D
D1604	B	C	3C
D2001	A	C	4A
D2002	A	C	4A
D3001	B	C	3A
D3002	B	C	3B
D3003	B	C	3A
D3701	A	C	1A
D5501	A	C	3C
D6002	A	C	2A
D6201	A	C	2B
D6202	A	C	2C
D6203	A	C	1C
D6204	A	C	1B
D6205	A	C	1B
D6206	A	C	2B
D6207	A	C	2B
D6701	A	C	2C
D6702	A	C	2C
D8051	B	C	2C
D8401	A	C	5B
IC			
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IC1002	B	C	5A
IC1003	B	C	4A
IC1004	B	C	4B
IC1005	B	C	4B
IC1006	B	C	4B
IC1007	B	C	4A
IC1008	B	C	4A
IC1009	B	C	4A
IC1303	B	C	3A
IC1304	B	C	3A
IC1401	B	C	3B
IC1402	B	C	3A
IC1403	B	C	3B
IC1404	B	C	3A
IC1601	B	C	3C
IC2001	A	C	4A
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IC3005	B	C	1A
IC3006	B	C	3A
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IC3501	A	C	2C
IC3701	A	C	1A
IC3901	A	C	4A
IC3902	A	C	3B
IC3903	A	C	4A
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IC4201	B	C	4C
IC4202	B	C	4C
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IC8053	B	C	2C
IC8401	A	C	3C
IC8402	A	C	5B
IC8403	A	C	5B
COIL			
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L1002	B	C	4A
L1401	B	C	3B
L1402	B	C	3B
L2001	A	C	4A
L2002	A	C	4B
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L3012	B	C	1A
L3013	B	C	3A
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L3503	A	C	2B
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L3952	A	C	3A
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L4307	B	C	3B
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L4851	A	C	4B
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L4853	A	C	4B
L5501	A	C	3C
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L8001	B	C	2C
L8002	B	C	1A
L8003	B	C	1B
L8401	A	C	3B
L8402	A	C	4B
TRANSISTOR			
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Q1003	B	C	4A
Q1004	B	C	4A
Q1005	B	C	4A
Q1006	B	C	5A
Q1007	B	C	5A
Q1301	B	C	3A
Q1401	B	C	3B
Q1402	B	C	3B
Q1403	B	C	3A
Q1404	B	C	3A
Q1601	B	C	3D
Q2001	A	C	4A
Q2002	A	C	5A
Q2004	A	C	4A
Q3701	A	C	3A
Q3702	A	C	1A
Q3703	A	C	1A
Q3951	A	C	3A
Q3952	A	C	3B
Q3953	A	C	3B
Q3954	A	C	3B
Q4301	B	C	4B
Q4302	B	C	4B
Q4303	B	C	4B
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Q6217	A	C	2B
Q6701	A	C	2D
Q8001	B	C	3C
Q8401	A	C	3B
RESISTOR			
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R1003	B	C	5B
R1004	B	C	5B
R1005	B	C	5B
R1006	B	C	5B
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R1015	B	C	4A
R1016	B	C	4A
R1017	B	C	3A
R1018	B	C	3A
R1019	B	C	3A

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R1025	B	C	4B
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R1027	B	C	4B
R1028	B	C	4B
R1029	B	C	5A
R1030	B	C	5A
R1031	B	C	4B
R1032	B	C	4B
R1033	B	C	5A
R1034	B	C	5A
R1035	B	C	5A
R1036	B	C	3B
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R1038	B	C	4A
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R1605	B	C	3D
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R1630	A	C	3A
R1631	A	C	3A
R1635	B	C	4D
R1636	B	C	4D
R1637	B	C	4D
R1638	B	C	3C
R1639	B	C	3C
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R1643	B	C	3C
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R2109	A	C	5A
R2110	A	C	5A
R2111	A	C	5A
R2112	A	C	5A
R2113	A	C	5A
R2114	A	C	5A
R2117	A	C	5A
R2118	A	C	5A
R2119	A	C	5A
R2120	A	C	5A
R2127	A	C	5A
R2128	A	C	5A
R2129	A	C	5B
R2130	A	C	5A
R2201	A	C	5A
R2202	A	C	5A
R3002	B	C	2A
R3004	B	C	2A
R3007	B	C	2A
R3008	B	C	2A
R3009	B	C	3A
R3010	B	C	3A
R3011	B	C	3A
R3013	B	C	2A
R3014	B	C	2A
R3015	B	C	2A
R3016	B	C	1A
R3017	B	C	1A
R3018	B	C	1A
R3019	B	C	1A
R3020	B	C	1A
R3021	B	C	1A
R3022	B	C	1A
R3023	B	C	1A

REF.NO.	LOCATION		
R3024	B	C	1A
R3026	B	C	2B
R3027	B	C	3A
R3028	B	C	2B
R3029	B	C	2B
R3030	B	C	3B
R3031	B	C	3A
R3032	B	C	3A
R3033	B	C	3A
R3034	B	C	3A
R3035	B	C	2B
R3036	B	C	2A
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R3904	A	C	4A
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R3954	A	C	3A
R3955	A	C	3A
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R3961	A	C	3B
R3962	A	C	3B
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R3966	A	C	3B
R3967	A	C	3B
R3968	A	C	3B
R3969	A	C	3B
R4201	B	C	5C
R4202	B	C	5C
R4203	B	C	5C
R4204	B	C	5D
R4205	B	C	4C
R4206	B	C	4C
R4207	B	C	4C
R4208	B	C	4C
R4301	B	C	4B
R4302	B	C	3C
R4303	B	C	5C
R4304	B	C	5C
R4307	B	C	5C
R4308	B	C	5C
R4311	B	C	5B
R4312	B	C	5B

REF.NO.	LOCATION		
R4313	B	C	5B
R4314	B	C	5B
R4315	B	C	5B
R4316	B	C	4B
R4317	B	C	4B
R4318	B	C	4B
R4319	B	C	4B
R4320	B	C	4B
R4321	B	C	4B
R4322	B	C	4B
R4323	B	C	4B
R4324	B	C	4B
R4325	B	C	4B
R4326	B	C	4B
R4327	B	C	4B
R4330	B	C	4B
R4331	B	C	4B
R4332	B	C	4B
R4333	B	C	4B
R4334	B	C	4B
R4335	B	C	4B
R4336	B	C	4B
R4338	B	C	4C
R4340	B	C	4B
R4342	B	C	5B
R4343	B	C	5B
R4344	B	C	5C
R4345	B	C	4C
R4346	A	C	2B
R4347	B	C	5B
R4348	B	C	4B
R4349	B	C	5B
R4350	B	C	4B
R4351	B	C	5B
R4804	A	C	3C
R4805	A	C	3C
R4806	A	C	4C
R4807	A	C	4C
R4808	A	C	4C
R4809	A	C	3C
R4810	A	C	4C
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R4822	A	C	4B
R4823	A	C	4B
R4824	A	C	4B
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R4836	A	C	4C
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R4848	A	C	3B
R4850	A	C	3B
R4852	A	C	4C
R4856	A	C	4B
R4857	A	C	4B
R4858	A	C	4B
R4862	A	C	4C
R4863	A	C	4C
R4864	A	C	4C
R4865	A	C	4C
R4866	A	C	4C
R4867	A	C	4C
R4868	A	C	4C
R4870	A	C	4B
R4874	A	C	4B
R5501	A	C	4C
R5503	A	C	4C
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R5506	A	C	4C
R5507	A	C	4C
R5509	A	C	4C
R5510	A	C	4C
R5511	A	C	4C
R5512	A	C	4C
R5513	A	C	4C
R5514	A	C	4C
R5515	A	C	4C
R5516	A	C	4C
R6001	A	C	2A
R6002	A	C	2A
R6003	A	C	2A
R6004	A	C	2A
R6005	A	C	2A

REF.NO.	LOCATION		
R6009	A	C	1A
R6010	A	C	2A
R6011	A	C	2A
R6012	A	C	2A
R6013	A	C	2A
R6014	A	C	1B
R6015	A	C	1B
R6016	A	C	1B
R6101	A	C	2B
R6102	A	C	2B
R6103	A	C	3B
R6104	A	C	3B
R6105	A	C	2B
R6106	A	C	3B
R6107	A	C	3B
R6108	A	C	3B
R6109	A	C	3B
R6110	A	C	3A
R6113	A	C	3A
R6114	A	C	2A
R6115	A	C	2A
R6116	A	C	2A
R6117	A	C	2A
R6118	A	C	2B
R6122	A	C	3B
R6123	A	C	2B
R6124	A	C	2B
R6201	A	C	3A
R6202	A	C	3A
R6203	A	C	3A
R6204	A	C	2A
R6205	A	C	2A
R6206	A	C	2A
R6207	A	C	2A
R6208	A	C	3A
R6209	A	C	3A
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R6221	A	C	3A
R6223	A	C	3A
R6224	A	C	2A
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R6230	A	C	3A
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R6232	A	C	3B
R6233	A	C	3B
R6234	A	C	3B
R6235	A	C	3B
R6236	A	C	3B
R6237	A	C	3B
R6238	A	C	3B
R6239	A	C	3B
R6240	A	C	3B
R6241	A	C	3B
R6242	A	C	2B
R6243	A	C	2B
R6244	A	C	2B
R6245	A	C	2B
R6246	A	C	2B
R6701	A	C	2C
R6702	A	C	2C
R6703	A	C	2C
R6712	A	C	1A
R6713	A	C	1A
R8001	B	C	3C
R8002	B	C	2C
R8003	B	C	2C
R8004	B	C	1C
R8006	B	C	2B
R8013	B	C	2C
R8014	B	C	2C
R8015	B	C	1C
R8016	B	C	1C
R8017	B	C	1C
R8018	B	C	1C
R8019	B	C	1C
R8020	B	C	1C
R8021	B	C	1C
R8022	B	C	2C
R8023	B	C	2C
R8024	B	C	2C

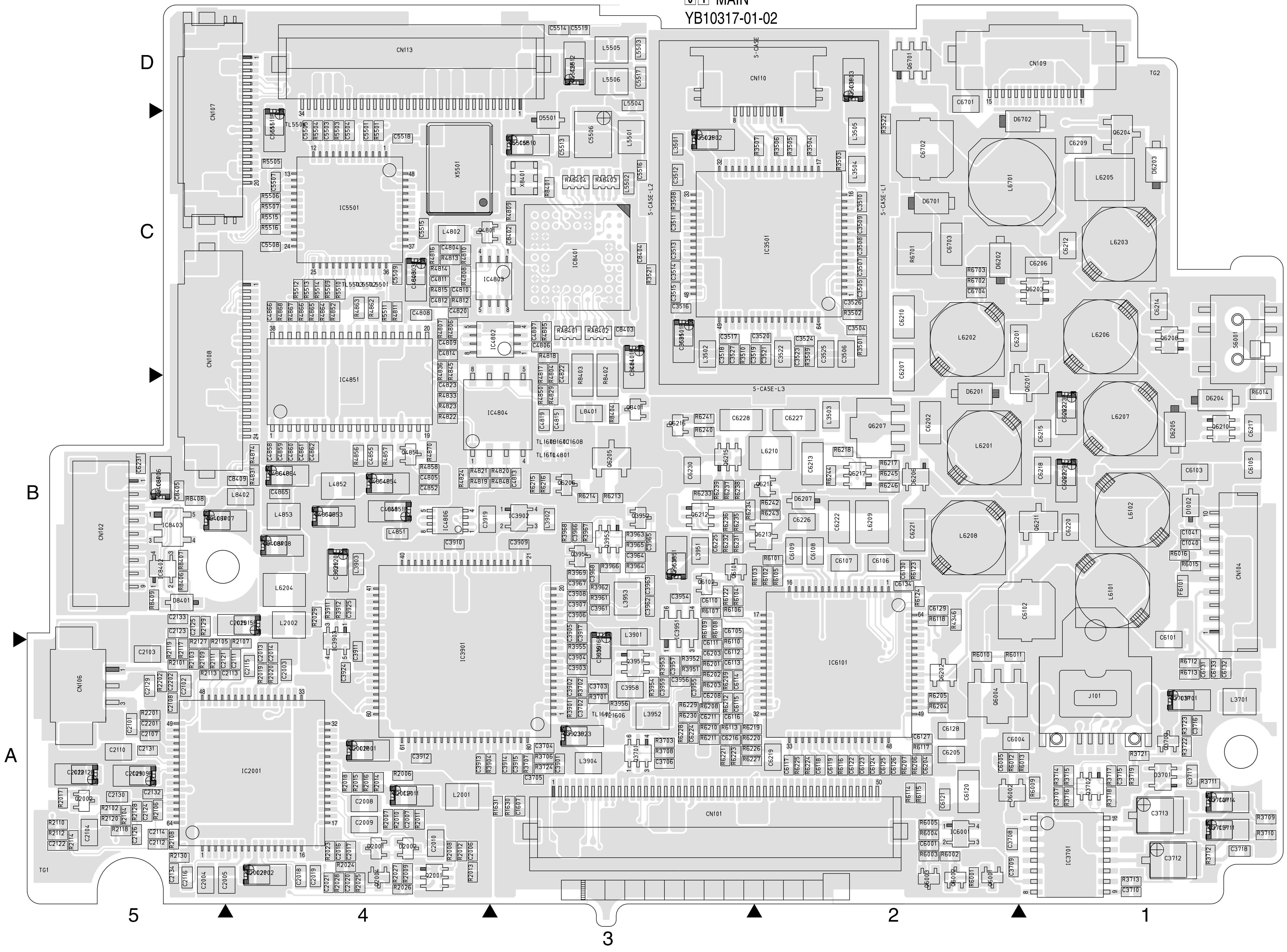
REF.NO.	LOCATION		
R8025	B	C	2C
R8026	B	C	2C
R8027	B	C	2D
R8028	B	C	2C
R8030	B	C	3C
R8031	B	C	3C
R8035	B	C	3B
R8036	B	C	3C
R8037	B	C	1C
R8038	B	C	1C
R8053	B	C	2C
R8056	B	C	2C
R8057	B	C	2C
R8059	B	C	2C
R8060	B	C	2C
R8401	A	C	3C
R8402	A	C	3C
R8403	A	C	3C
R8404	A	C	3B
R8406	A	C	5B
R8407	A	C	5B
R8408	A	C	5B
R8409	A	C	5B
RA1001	B	C	5A
RA1002	B	C	5A
RA1003	B	C	5A
RA1004	B	C	5A
RA1005	B	C	5A
RA1006	B	C	4A
RA1007	B	C	5A
RA1008	B	C	4A
RA1009	B	C	5A
RA1010	B	C	5A
RA1401	B	C	3B
RA1402	B	C	3B
RA1403	B	C	3B
RA3001	B	C	3A
RA4301	B	C	4D
RA4302	B	C	4D
RA4303	B	C	4D
RA4304	B	C	3C
RA4305	B	C	3C
RA4306	B	C	3B
RA8401	A	C	3C
RA8402	A	C	3C
RA8403	A	C	3C
RA8404	A	C	3C

OTHER			
F6101	A	C	1B
J101	A	D	1A
S6001	A	C	1C
TL1001	B	C	4A
TL1002	B	C	4A
TL1003	B	C	4A
TL1301	B	C	4B
TL1401	B	C	3B
TL1402	B	C	3B
TL1403	B	C	3B
TL1404	B	C	3B
TL1406	B	C	3A
TL1407	B	C	3A
TL1408	B	C	3A
TL1409	B	C	3A
TL1410	B	C	3A
TL1411	B	C	3A
TL1412	B	C	3B
TL1413	B	C	3B
TL1414	B	C	3A
TL1415	B	C	3A
TL1416	B	C	3A
TL1601	B	C	3C
TL1602	B	C	3C
TL1603	B	C	3C
TL1604	B	C	3D
TL1605	A	C	3A
TL1606	A	C	3A
TL1607	A	C	3B
TL1608	A	C	3B
TL1609	A	C	3B
TL1610	A	C	3B
TL1611	B	C	2C
TL1612	B	C	3D
TL1613	B	C	3B
TL1614	B	C	3D
TL1615	B	C	3D
TL1616	B	C	3C
TL1617	B	C	3C
TL1618	B	C	3C
TL1619	B	C	3C
TL3001	B	C	1C
TL3002	B	C	2A
TL3004	B	C	1C
TL3501	B	C	1C
TL4201	B	C	4C

REF.NO.	LOCATION		
TL4202	B	C	5C
TL4203	B	C	5D
TL4301	B	C	3C
TL4302	B	C	4B
TL4303	B	C	4B
TL4304	B	C	4C
TL4305	B	C	4B
TL4306	B	C	4B
TL4307	B	C	4B
TL4308	B	C	4B
TL4309	B	C	4B
TL4310	B	C	4B
TL4311	B	C	4B
TL4312	B	C	4B
TL4313	B	C	4B
TL4314	B	C	4B
TL4405	B	C	4B
TL4801	A	C	3B
TL5501	A	C	4C
TL5502	A	C	4C
TL5503	A	C	4C
TL5504	A	C	4C
X1001	B	C	4A
X1002	B	C	5A
X5501	A	C	4C
X8001	B	C	2D
X8401	A	C	3C

COMPONENT SIDE(A)

01 MAIN
YB10317-01-02


D
C
B
A
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CN113
CN107
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IC4851
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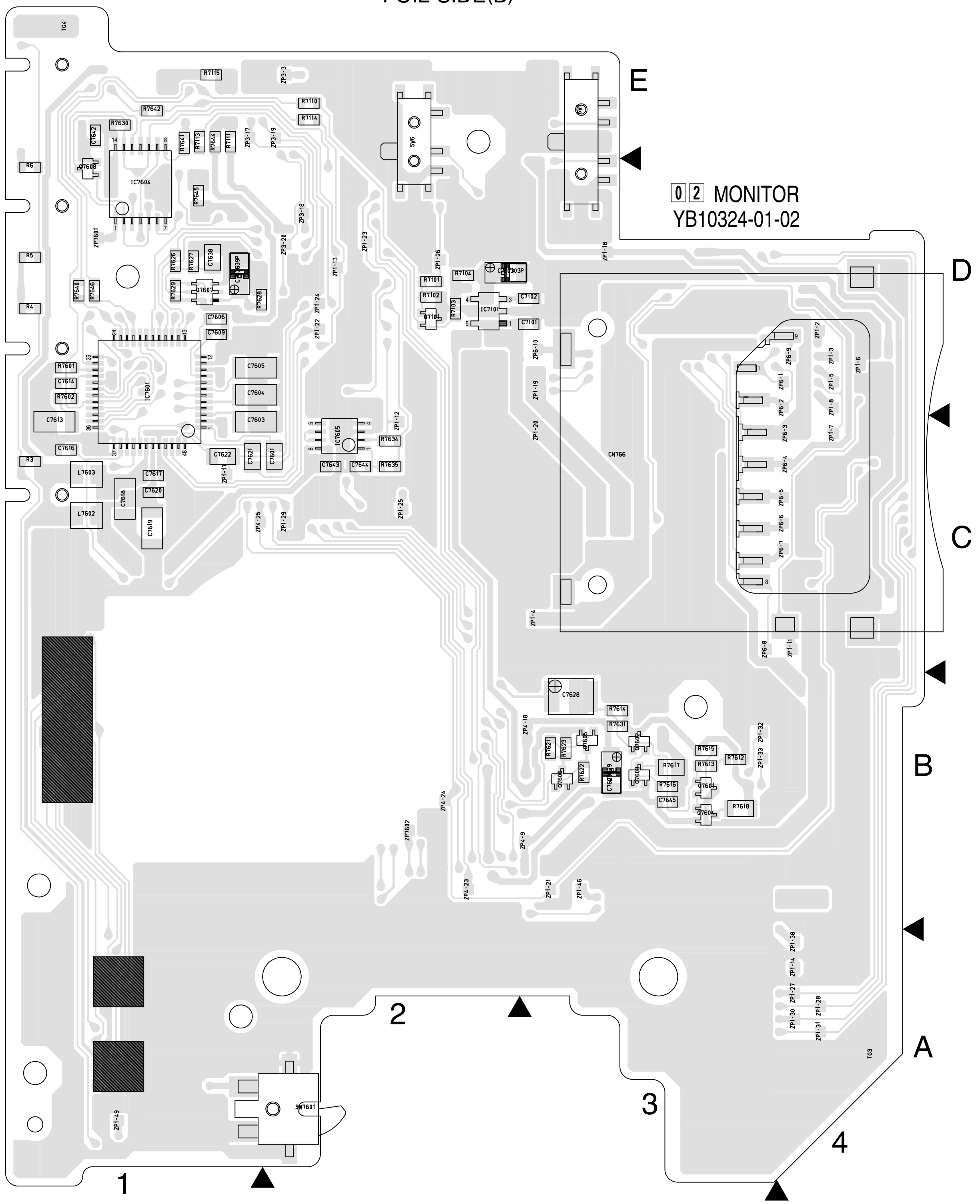
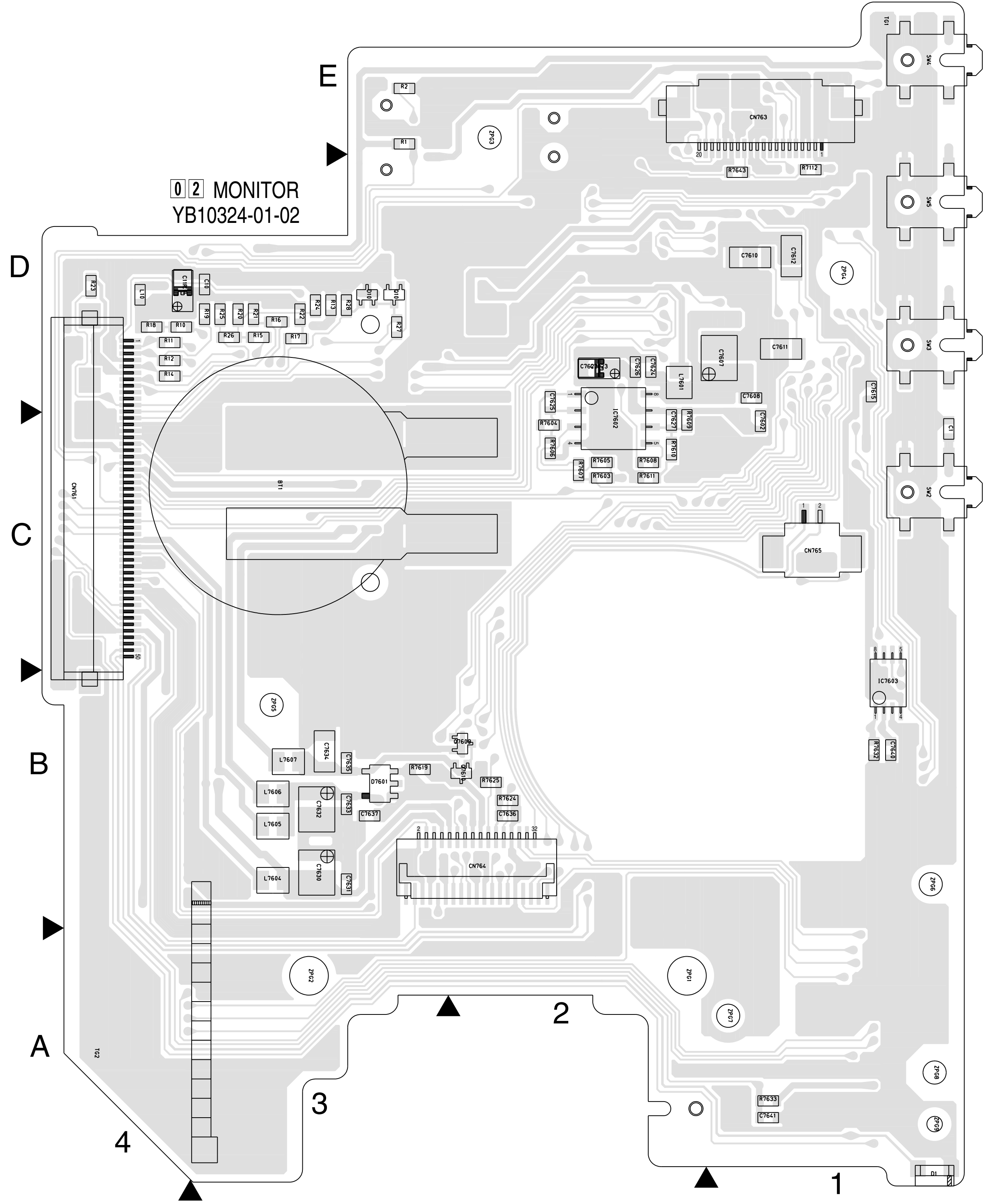
X8401
J101
L6701
L6203
L6202
L6206
L6201
L6207
L6208
L6102
L6101
S6001
S-CASE
S-CASE-L1
S-CASE-L2
S-CASE-L3
TG1
TG2

4.24 MONITOR CIRCUIT BOARD

FOIL SIDE(B)



COMPONENT SIDE(A)



COMPONENT PARTS LOCATION GUIDE ＜MONITOR＞

REF.NO.	LOCATION		
CAPACITOR			
C1	A	C	1C
C10	A	C	3D
C11	A	C	4D
C7101	B	C	3D
C7102	B	C	3D
C7103	B	C	2D
C7601	B	C	2C
C7602	A	C	1C
C7603	B	C	2C
C7604	B	C	2D
C7605	B	C	2D
C7606	B	C	1D
C7607	A	C	1D
C7608	A	C	1D
C7609	B	C	1D
C7610	A	C	1D
C7611	A	C	1D
C7612	A	C	1D
C7613	B	C	1C
C7614	B	C	1D
C7615	A	C	1D
C7616	B	C	1C
C7617	B	C	1C
C7618	B	C	1C
C7619	B	C	1C
C7620	B	C	1C
C7621	B	C	2C
C7622	B	C	1C
C7623	A	C	2D
C7624	A	C	2D
C7625	A	C	2D
C7626	A	C	2D
C7627	A	C	2C
C7628	B	C	3B
C7629	B	C	3B
C7630	A	C	3B
C7631	A	C	3B
C7632	A	C	3B
C7633	A	C	3B
C7634	A	C	3B
C7635	A	C	3B
C7636	A	C	2B
C7637	A	C	3B
C7638	B	C	1D
C7639	B	C	1D
C7640	A	C	1B
C7641	A	C	1A
C7642	B	C	1E
C7643	B	C	2C
C7644	B	C	2C
C7645	B	C	3B
CONNECTOR			
CN761	A	C	4D
CN763	A	C	1E
CN764	A	C	3B
CN765	A	C	1C
CN766	B	C	4C
DIODE			
D1	A	C	1A
D10	A	C	3D
D7601	A	C	3B
IC			
IC7101	B	C	2D
IC7601	B	C	1D
IC7602	A	C	2C
IC7603	A	C	1B
IC7604	B	C	1D
IC7605	B	C	2C
COIL			
L10	A	C	4D
L7601	A	C	2D
L7602	B	C	1C
L7603	B	C	1C
L7604	A	C	3B
L7605	A	C	3B
L7606	A	C	3B
L7607	A	C	3B
TRANSISTOR			
Q10	A	C	3D
Q7101	B	C	2D
Q7601	B	C	3B
Q7602	B	C	3B
Q7603	B	C	3B
Q7604	B	C	3B
Q7605	B	C	3B
Q7606	B	C	3B
Q7607	B	C	1D
Q7608	B	C	1D
Q7609	A	C	2B
Q7610	A	C	2B
RESISTOR			
R1	A	C	3E
R2	A	C	3E
R3	B	C	1C
R4	B	C	1D
R5	B	C	1D
R6	B	C	1D
R10	A	C	4D
R11	A	C	4D
R12	A	C	4D
R13	A	C	3D
R14	A	C	4D
R15	A	C	3D
R16	A	C	3D
R17	A	C	3D
R18	A	C	4D
R19	A	C	3D
R20	A	C	3D
R21	A	C	3D
R22	A	C	3D
R23	A	C	4D
R24	A	C	3D
R25	A	C	3D
R26	A	C	3D
R27	A	C	3D
R28	A	C	3D
R7101	B	C	2D
R7102	B	C	2D
R7103	B	C	2D
R7104	B	C	2D
R7110	B	C	2E
R7111	B	C	1E
R7112	A	C	1D
R7113	B	C	1E
R7114	B	C	2E
R7115	B	C	1E
R7601	B	C	1D
R7602	B	C	1D
R7603	A	C	2C
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R7605	A	C	2C
R7606	A	C	2C
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R7608	A	C	2C
R7609	A	C	2C
R7610	A	C	2C
R7611	A	C	2C
R7612	B	C	3B
R7613	B	C	3B
R7614	B	C	3B
R7615	B	C	3B
R7616	B	C	3B
R7617	B	C	3B
R7618	B	C	3B
R7619	A	C	3B
R7621	B	C	3B
R7622	B	C	3B
R7623	B	C	3B
R7624	A	C	2B
R7625	A	C	2B
R7626	B	C	1D
R7627	B	C	1D
R7628	B	C	2D
R7629	B	C	1D
R7630	B	C	1E
R7631	B	C	3B
R7632	A	C	1B
R7633	A	C	1A
R7634	B	C	2C
R7635	B	C	2C
R7640	B	C	1D
R7641	B	C	1E
R7642	B	C	1E
R7643	A	C	1D
R7644	B	C	1E
R7645	B	C	1D
R7646	B	C	1D
OTHER			
BT1	A	C	3C
C11P	A	C	4D
C7103P	B	C	3D
C7623P	A	C	2D
C7629P	B	C	3B
C7639P	B	C	1D
SW1	B	C	3E
SW2	A	C	1C
SW3	A	C	1D
SW4	A	C	1E
SW5	A	C	1D
SW6	B	C	2E
SW7601	B	C	2A
TM1	A	C	4A
ZP1-2	B	C	4D
ZP1-3	B	C	4D
ZP1-4	B	C	3C
ZP1-5	B	C	4D
ZP1-6	B	C	4D
ZP1-7	B	C	4C
ZP1-8	B	C	4D
ZP3-3	B	C	2E
ZP4-9	B	C	3B
ZP6-1	B	C	4D
ZP6-2	B	C	4D
ZP6-3	B	C	4C
ZP6-4	B	C	4C
ZP6-5	B	C	4C
ZP6-6	B	C	4C
ZP6-7	B	C	4C
ZP6-8	B	C	4C
ZP6-9	B	C	4D
ZP1-11	B	C	4C
ZP1-12	B	C	2C
ZP1-13	B	C	2D
ZP1-14	B	C	4A
ZP1-17	B	C	1C
ZP1-18	B	C	3D
ZP1-19	B	C	3D
ZP1-20	B	C	3C
ZP1-21	B	C	3B
ZP1-22	B	C	2D
ZP1-23	B	C	2D
ZP1-24	B	C	2D
ZP1-25	B	C	2C
ZP1-26	B	C	2D
ZP1-27	B	C	4A
ZP1-28	B	C	4A
ZP1-29	B	C	2C
ZP1-30	B	C	4A
ZP1-31	B	C	4A
ZP1-32	B	C	3B
ZP1-33	B	C	3B
ZP1-38	B	C	4A
ZP1-46	B	C	3B
ZP1-49	B	C	1A
ZP3-17	B	C	1E
ZP3-18	B	C	2D
ZP3-19	B	C	2E
ZP3-20	B	C	2D
ZP4-18	B	C	3B
ZP4-23	B	C	2B
ZP4-24	B	C	2B
ZP4-25	B	C	2C
ZP6-10	B	C	3D
ZP7601	B	C	1D
ZP7602	B	C	2B
ZPG1	A	D	2A
ZPG2	A	D	3A
ZPG3	A	D	2E
ZPG4	A	D	1D
ZPG5	A	D	3B
ZPG6	A	D	1B
ZPG7	A	D	1A
ZPG8	A	D	1A
ZPG9	A	D	1A

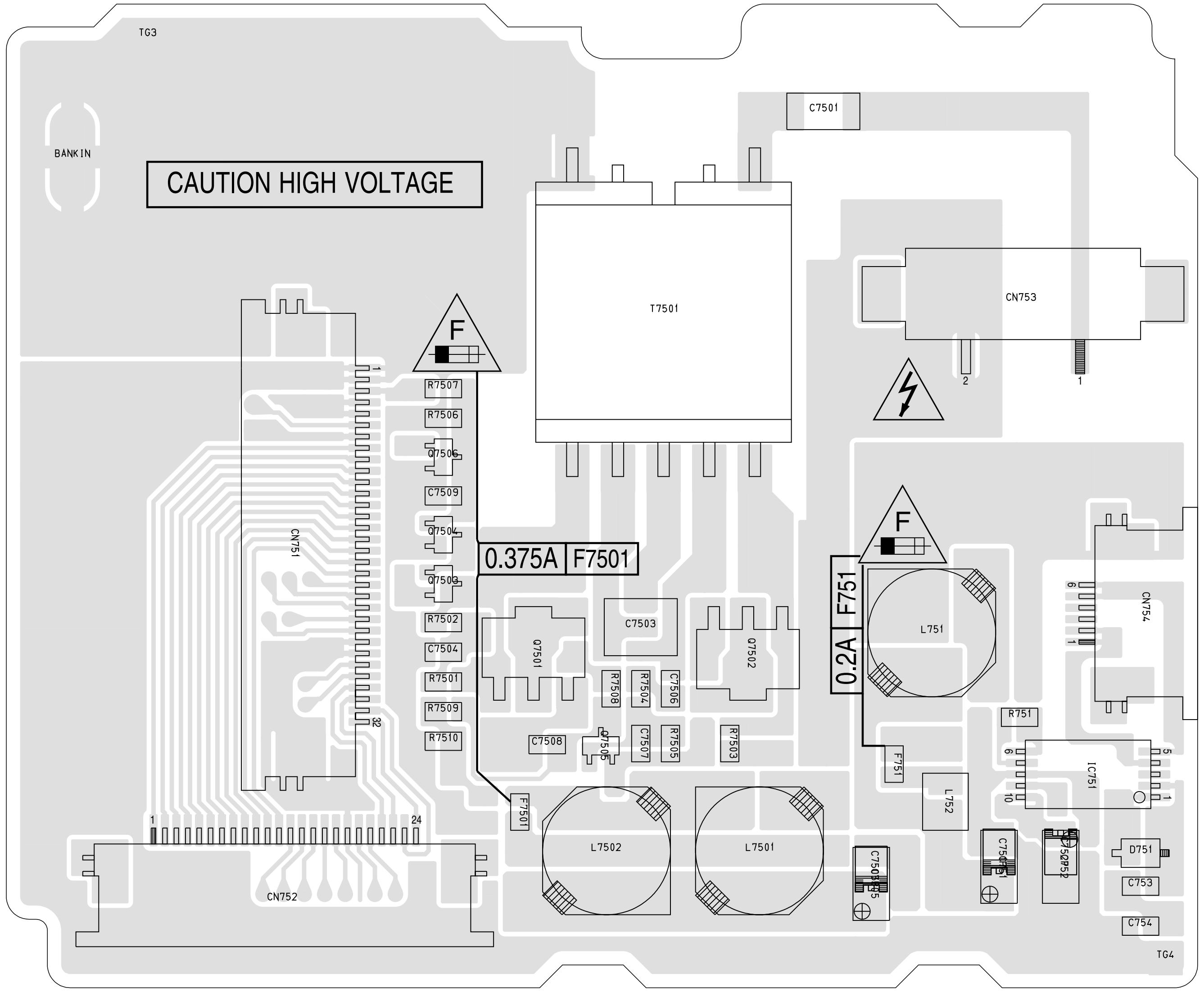
4.25 LCD BL CIRCUIT BOARD

• CAUTION:
FOR CONTINUED PROTECTION AGAINST
FIRE HAZARD .REPLACE ONLY WITH SAME
TYPE AND RATED FUSE(S).

• ATTENTION:
POUR UNE PROTECTION PERMANENTE
CONTRE LES RISQUE D'INCENDE,
REMPLACER LES FUSIBLES PAR UN AUTRE
DE MEME TYPE ET DE MEME TENSION.

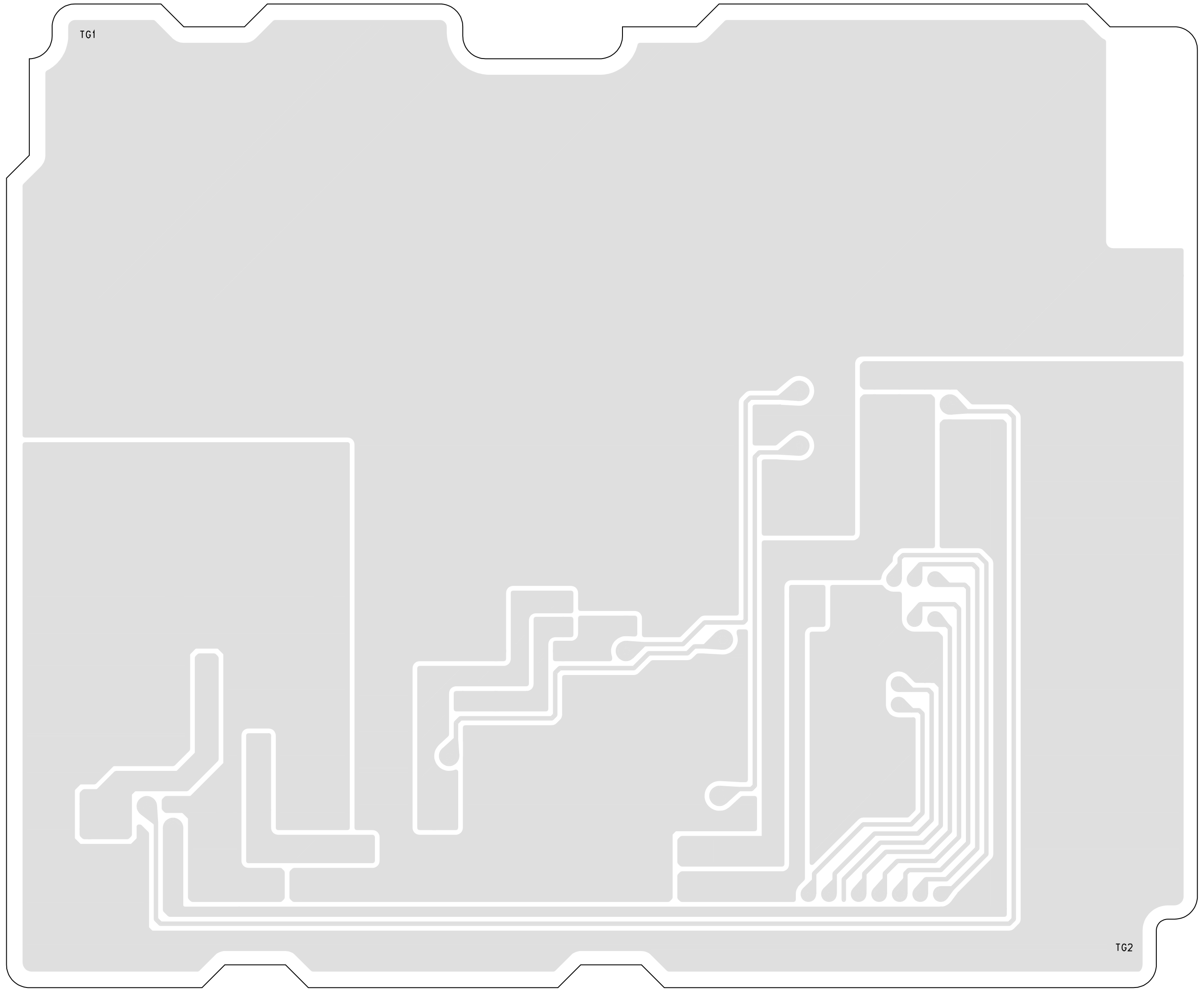
FOIL SIDE(B)

03 LCD BL
YB10324-01-02


TG3
BANKIN
CAUTION HIGH VOLTAGE
C7501
T7501
CN753
2
1
F
CN751
1
33
R7507
R7506
Q7506
C7509
Q7504
Q7503
R7502
C7504
R7501
R7509
R7510
0.375A
F7501
Q7501
C7503
Q7502
R7508
R7504
C7506
C7508
Q7505
C7507
R7505
R7503
F
0.2A
F751
L751
6
1
CN754
R751
IC751
F751
L752
F7501
L7502
L7501
C7505
C7502
D751
C753
C754
CN752
24
TG4

COMPONENT SIDE(A)

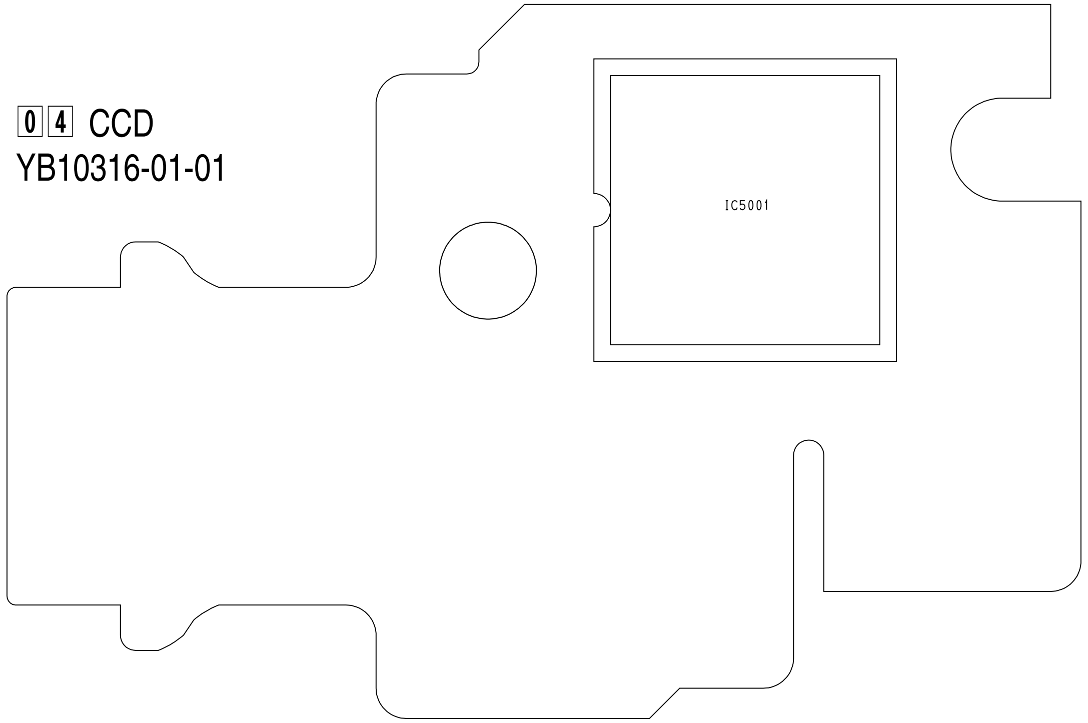
03 LCD BL
YB10324-01-02



4.26 CCD AND JUNCTION CIRCUIT BOARDS

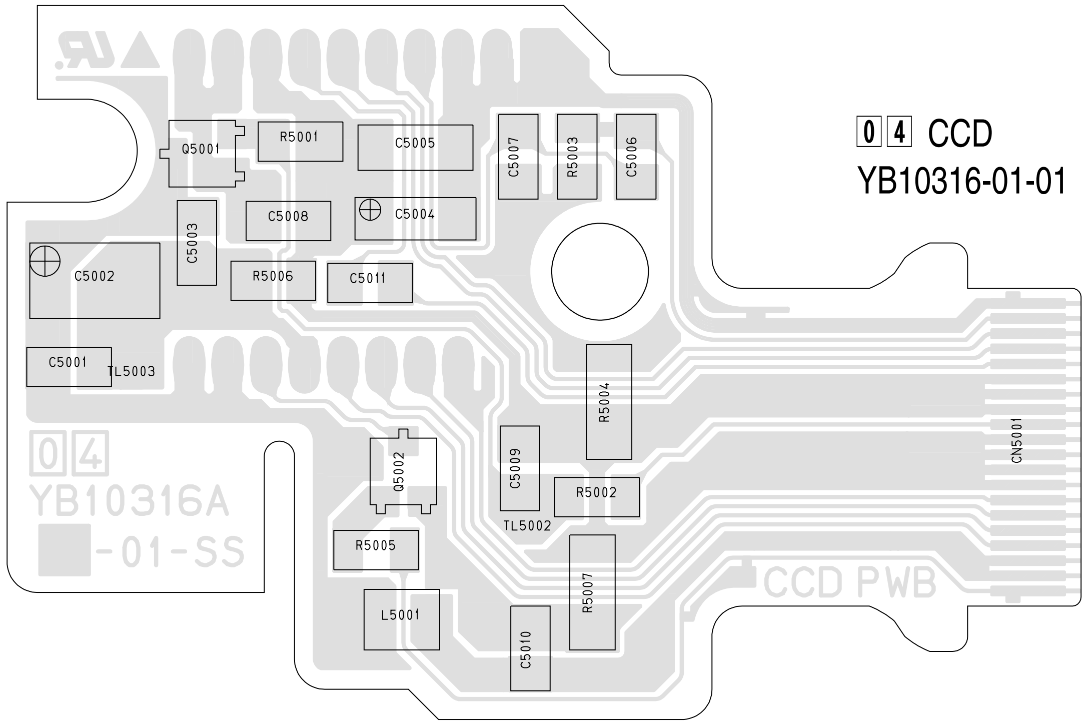
FOIL SIDE(B)

04 CCD
YB10316-01-01



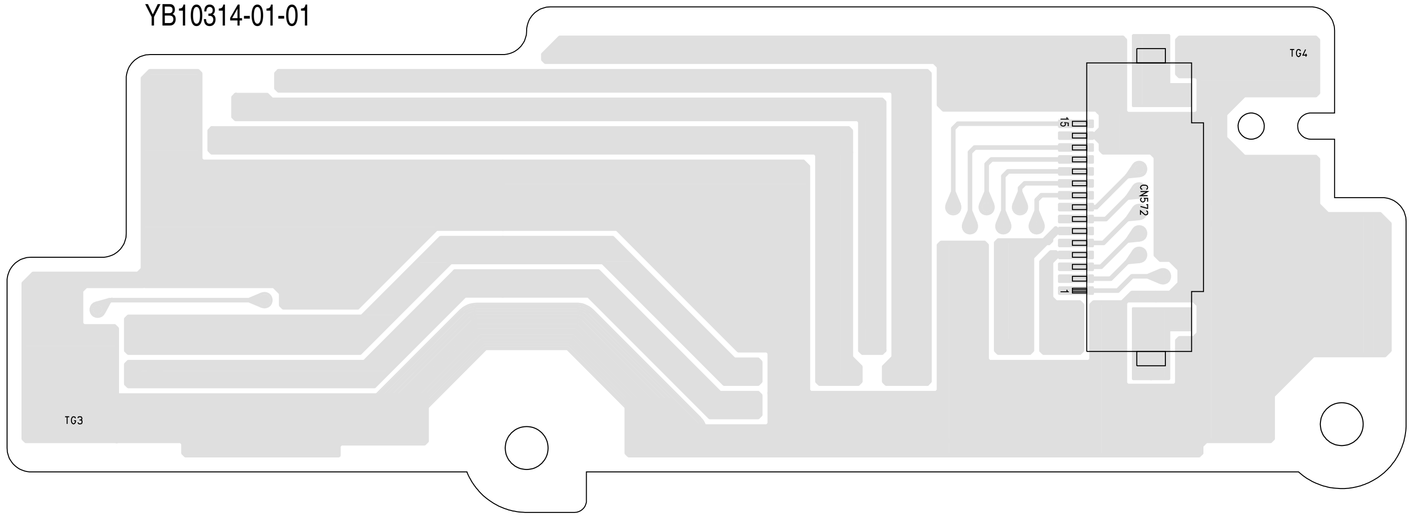
COMPONENT SIDE(A)

04 CCD
YB10316-01-01


Q5001
R5001
C5005
C5007
R5003
C5006
C5008
C5004
C5003
C5002
R5006
C5011
C5001
TL5003
R5004
CN5001
04
YB10316A
-01-SS
Q5002
C5009
R5002
TL5002
R5005
R5007
L5001
C5010
CCD PWB

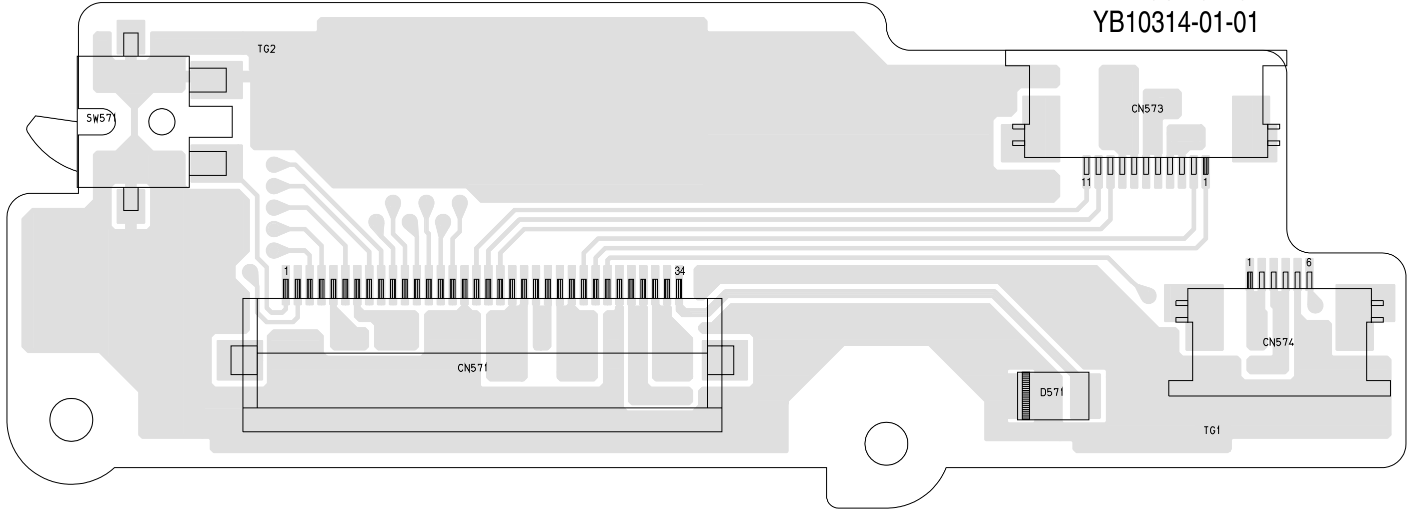
05 JUNCTION
YB10314-01-01

FOIL SIDE(B)


TG4
15
CN572
1
TG3

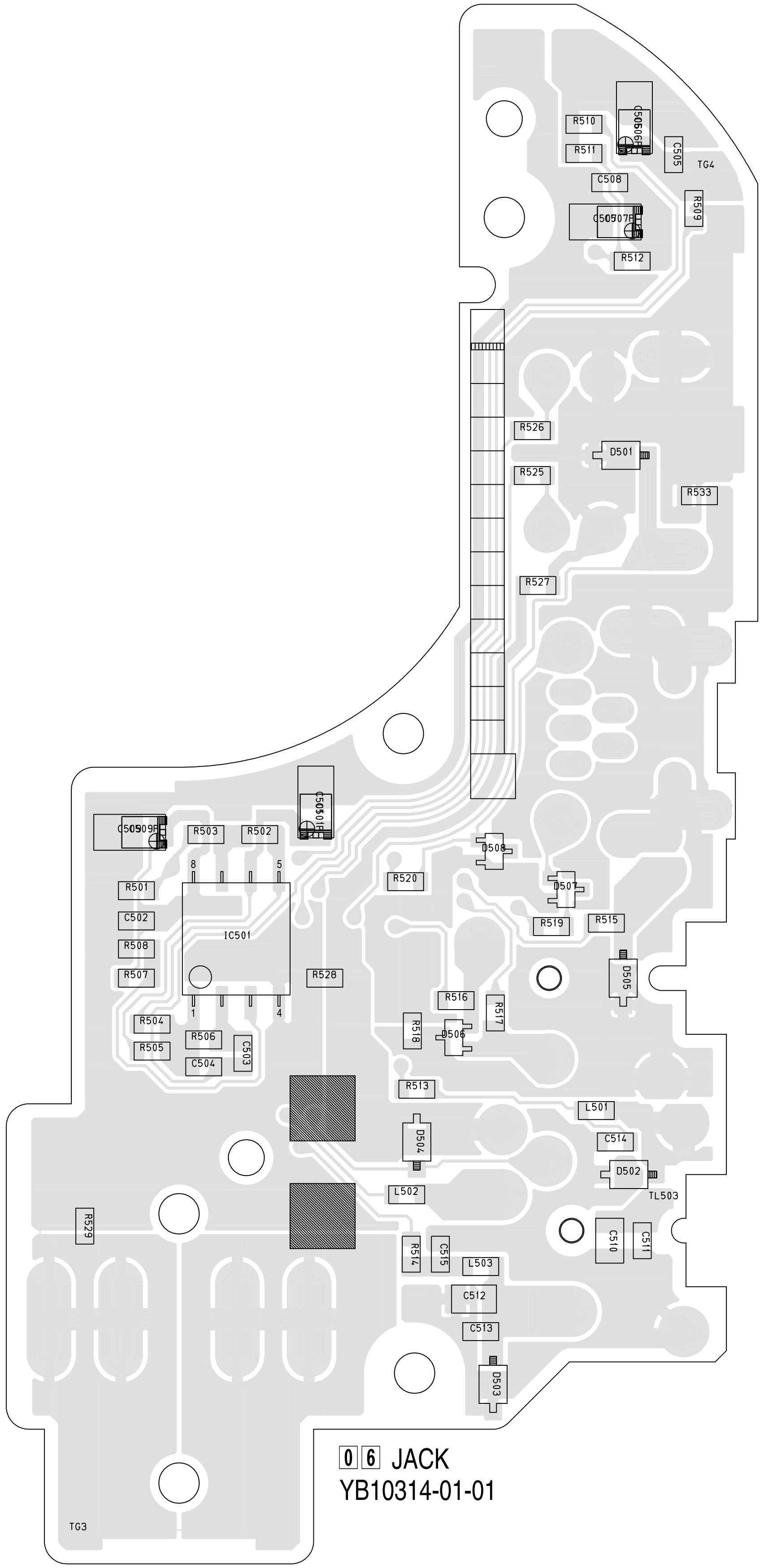
COMPONENT SIDE(A)

05 JUNCTION
YB10314-01-01

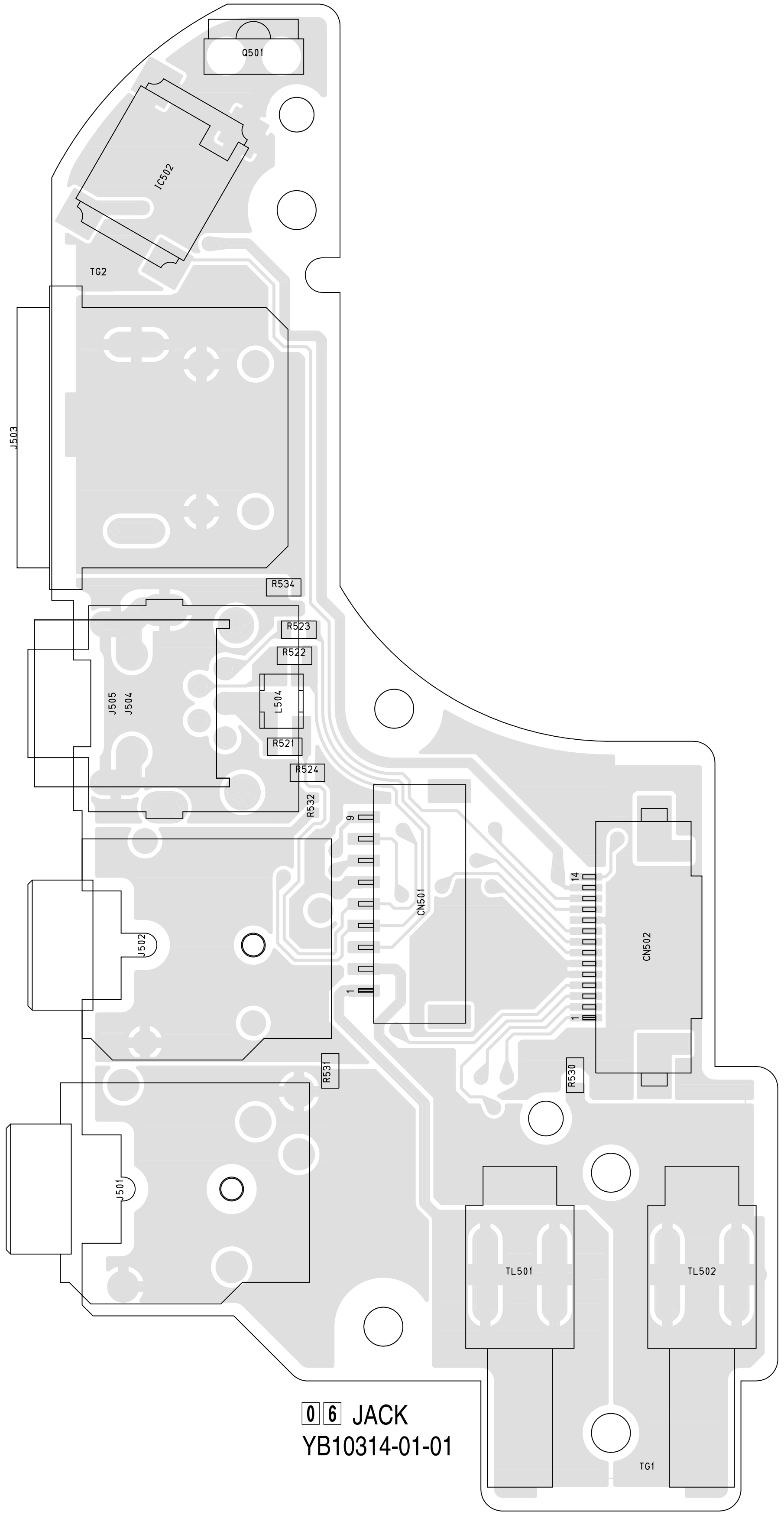

TG2
SW571
CN573
11
1
1
6
1
34
CN574
CN571
D571
TG1

4.27 JACK CIRCUIT BOARD

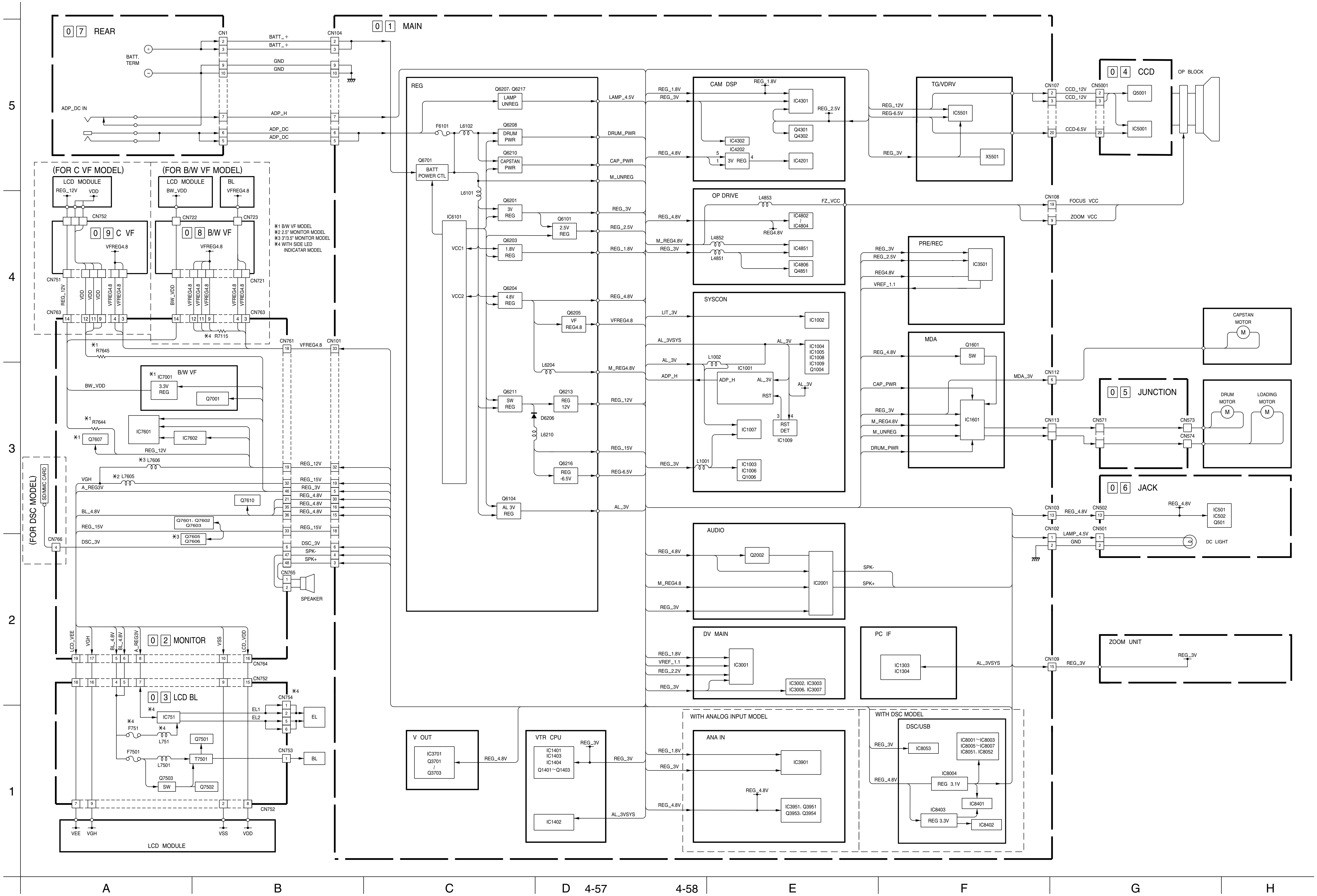
FOIL SIDE(B)


R510
R511
C506
C505
TG4
C508
R509
C507
R512
R526
D501
R525
R533
R527
C509
C501
R503
R502
8
5
R501
C502
IC501
R508
R507
R528
1
4
R504
R506
R505
C504
C503
D508
R520
D507
R519
R515
D505
R516
R517
R518
D506
R513
L501
C514
D504
D502
TL503
L502
R529
R514
C515
L503
C510
C511
C512
C513
D503
TG3
0 6 JACK
YB10314-01-01

COMPONENT SIDE(A)

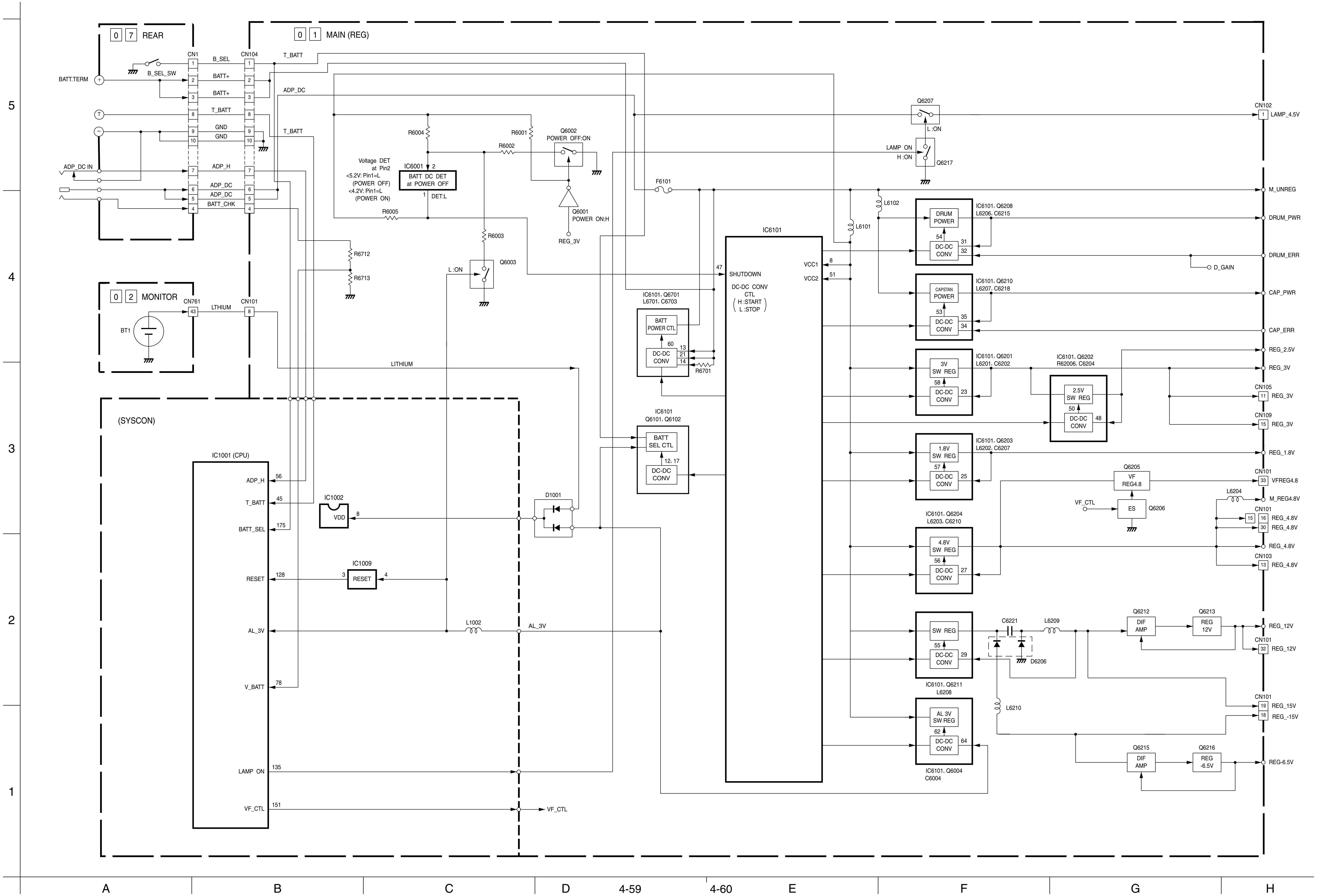

Q501
IC502
TG2
J503
R534
R523
R522
J505
J504
L504
R521
R524
R532
9
1
CN501
14
1
CN502
J502
R531
R530
J501
TL501
TL502
TG1
0 6 JACK
YB10314-01-01

4.28 POWER SYSTEM BLOCK DIAGRAM



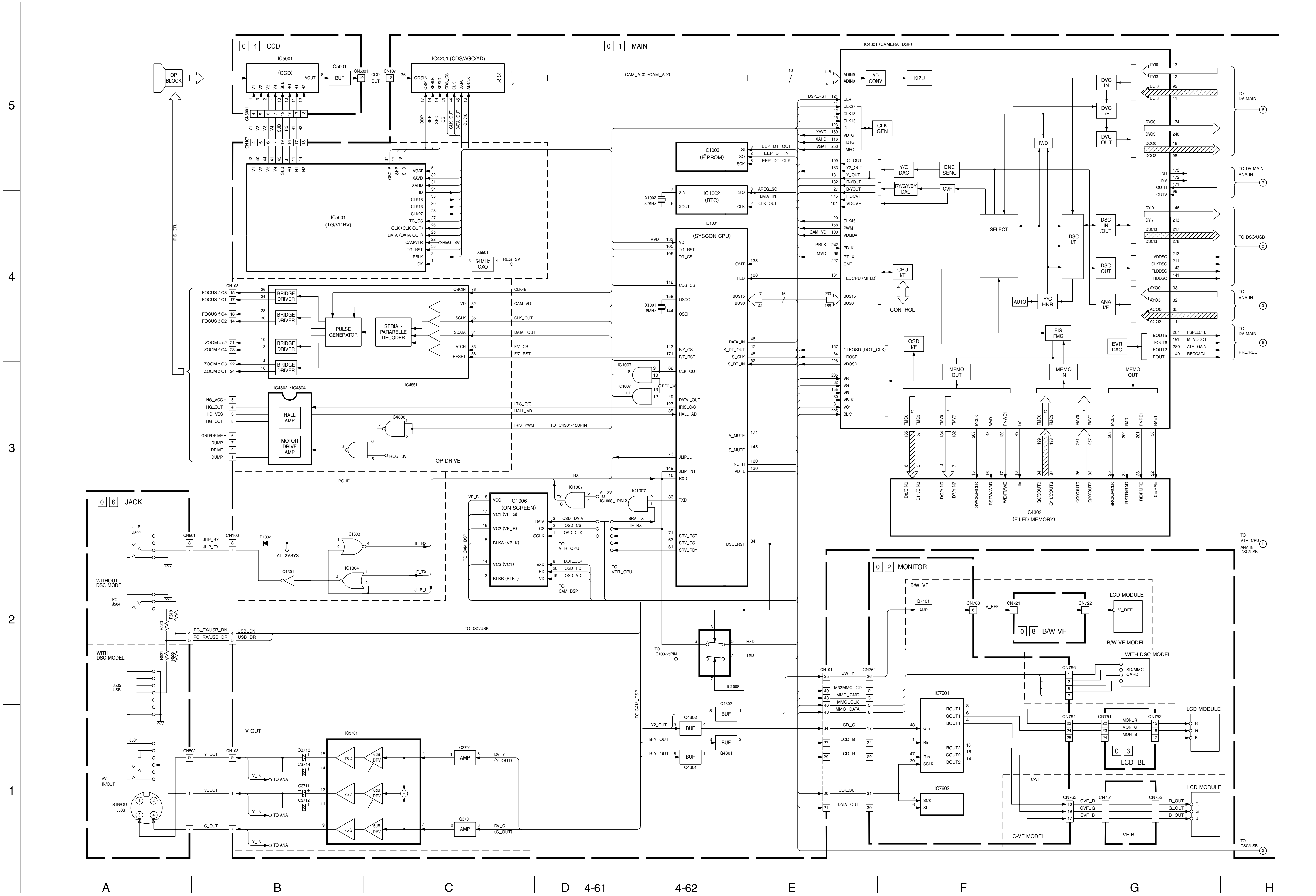
5
4
3
2
1
A
B
C
D
E
F
G
H
0 7 REAR
BATT. TERM
ADP_DC IN
CN1
BATT_+
BATT_+
GND
GND
ADP_H
ADP_DC
ADP_DC
CN104
0 1 MAIN
REG
Q6207, Q6217
LAMP UNREG
F6101
L6102
Q6208
DRUM PWR
Q6210
CAPSTAN PWR
Q6701
BATT POWER CTL
L6101
Q6201
3V REG
Q6101
2.5V REG
IC6101
VCC1
VCC2
Q6203
1.8V REG
Q6204
4.8V REG
Q6205
VF REG4.8
L6204
Q6211
SW REG
Q6213
REG 12V
D6206
L6210
Q6216
REG -6.5V
Q6104
AL 3V REG
LAMP_4.5V
DRUM_PWR
CAP_PWR
M_UNREG
REG_3V
REG_2.5V
REG_1.8V
REG_4.8V
VFREG4.8
M_REG4.8V
REG_12V
REG_15V
REG-6.5V
AL_3V
CAM DSP
REG_1.8V
IC4301
REG_2.5V
Q4301
Q4302
IC4302
IC4202
3V REG
IC4201
OP DRIVE
L4853
FZ_VCC
IC4802 ~ IC4804
REG4.8V
L4852
L4851
IC4851
IC4806
Q4851
SYSCON
LIT_3V
IC1002
AL_3VSYS
AL_3V
L1002
IC1004
IC1005
IC1008
IC1009
Q1004
IC1001
ADP_H
RST
RST DET
IC1009
IC1007
L1001
IC1003
IC1006
Q1006
TG/VDRV
REG_12V
REG-6.5V
IC5501
X5501
PRE/REC
IC3501
REG4.8V
VREF_1.1
MDA
Q1601
SW
IC1601
MDA_3V
M_REG4.8V
DRUM_PWR
CN107
CCD_12V
CCD-6.5V
CN5001
0 4 CCD
Q5001
IC5001
OP BLOCK
CN108
FOCUS VCC
ZOOM VCC
CAPSTAN MOTOR
M
CN112
0 5 JUNCTION
CN113
CN571
CN573
CN574
DRUM MOTOR
LOADING MOTOR
0 6 JACK
CN103
CN502
IC501
IC502
Q501
CN102
LAMP_4.5V
GND
CN501
DC LIGHT
AUDIO
Q2002
IC2001
SPK-
SPK+
M_REG4.8
DV MAIN
VREF_1.1
REG_2.2V
IC3001
IC3002, IC3003
IC3006, IC3007
PC IF
IC1303
IC1304
ZOOM UNIT
CN109
WITH ANALOG INPUT MODEL
ANA IN
IC3901
IC3951, Q3951
Q3953, Q3954
WITH DSC MODEL
DSC/USB
IC8053
IC8001~IC8003
IC8005~IC8007
IC8051, IC8052
IC8004
REG 3.1V
IC8401
IC8403
REG 3.3V
IC8402
V OUT
IC3701
Q3701 ~ Q3703
VTR CPU
IC1401
IC1403
IC1404
Q1401~Q1403
IC1402
(FOR C VF MODEL)
(FOR B/W VF MODEL)
LCD MODULE
REG_12V
VDD
BW_VDD
BL
VFREG4.8
CN752
CN722
CN723
0 9 C VF
0 8 B/W VF
✱1 B/W VF MODEL
✱2 2.5" MONITOR MODEL
✱3 3"/3.5" MONITOR MODEL
✱4 WITH SIDE LED INDICATOR MODEL
CN751
CN721
CN763
✱4 R7115
✱1 R7645
CN761
CN101
✱1 IC7001
B/W VF
3.3V REG
Q7001
✱1 R7644
IC7601
IC7602
✱1 Q7607
✱3 L7606
✱2 L7605
VGH
A_REG3V
Q7610
BL_4.8V
Q7601, Q7602
Q7603
✱3 Q7605
Q7606
DSC_3V
SPK-
SPK+
CN765
SPEAKER
(FOR DSC MODEL)
SD/MMC CARD
CN766
LCD_VEE
BL_4.8V
VSS
LCD_VDD
0 2 MONITOR
CN764
0 3 LCD BL
CN754
EL1
EL2
EL
✱4 IC751
✱4 F751
✱4 L751
Q7501
F7501
L7501
T7501
Q7503
SW
Q7502
CN753
CN752
VEE
VGH
VSS
VDD
LCD MODULE

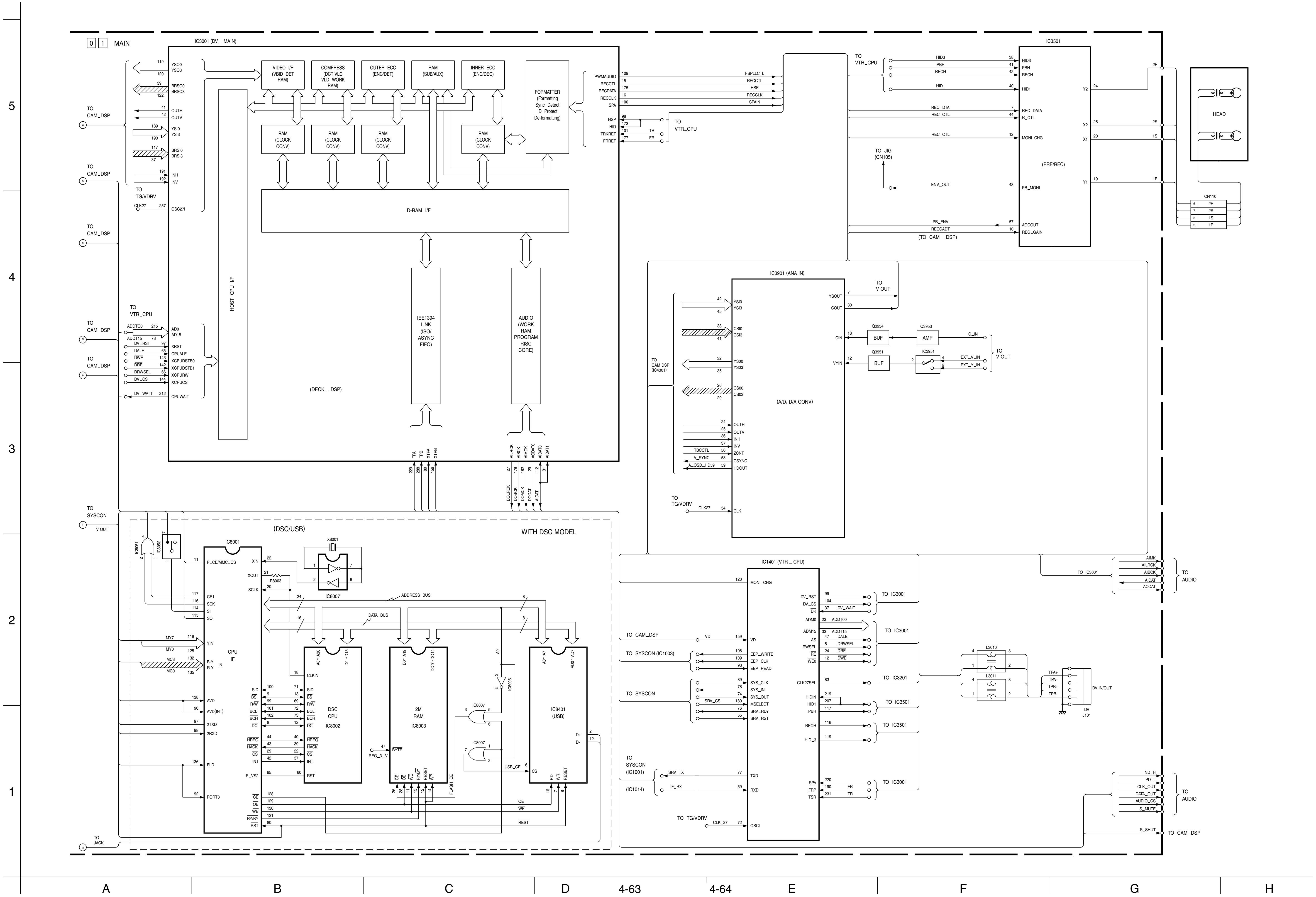
4.29 REGULATOR SYSTEM BLOCK DIAGRAM



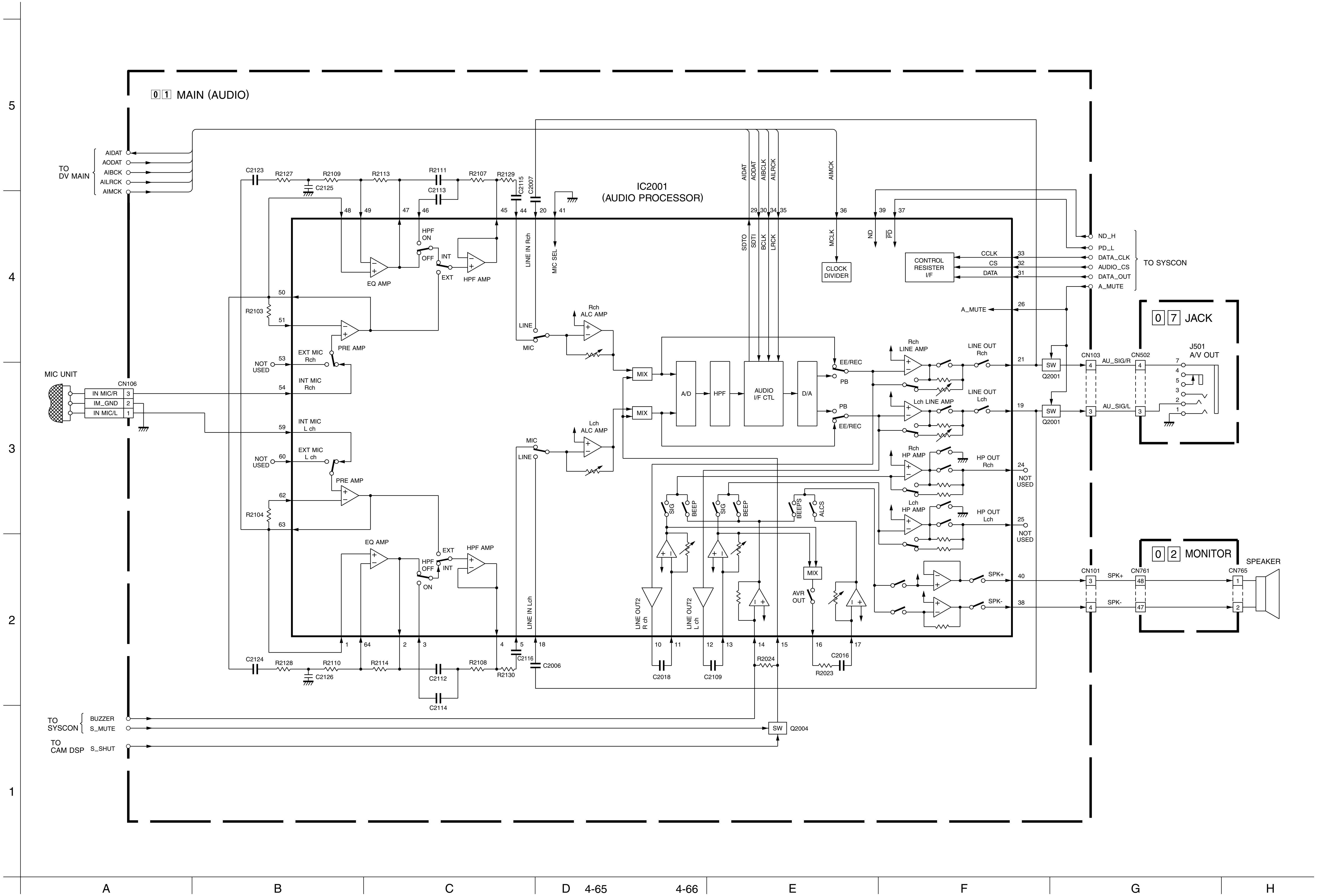
0 7 REAR
0 1 MAIN (REG)
0 2 MONITOR
(SYSCON)
BATT.TERM
CN1
CN104
CN761
CN101
B_SEL
B_SEL_SW
BATT+
T_BATT
GND
ADP_DC IN
ADP_H
ADP_DC
BATT_CHK
LTHIUM
LITHIUM
BT1
R6712
R6713
Voltage DET at Pin2
<5.2V: Pin1=L (POWER OFF)
<4.2V: Pin1=L (POWER ON)
IC6001
BATT DC DET at POWER OFF
DET:L
R6004
R6005
R6001
R6002
R6003
Q6002 POWER OFF:ON
Q6001 POWER ON:H
REG_3V
Q6003
L :ON
F6101
L6101
L6102
IC6101
SHUTDOWN
DC-DC CONV CTL (H :START L :STOP)
VCC1
VCC2
IC6101, Q6701 L6701, C6703
BATT POWER CTL
DC-DC CONV
R6701
IC6101 Q6101, Q6102
BATT SEL CTL
D1001
IC1001 (CPU)
ADP_H
T_BATT
BATT_SEL
RESET
AL_3V
V_BATT
LAMP ON
VF_CTL
IC1002
VDD
IC1009
RESET
L1002
AL_3V
VF_CTL
Q6207
L :ON
LAMP ON H :ON
Q6217
CN102
LAMP_4.5V
M_UNREG
IC6101, Q6208 L6206, C6215
DRUM POWER
DRUM_PWR
DRUM_ERR
D_GAIN
IC6101, Q6210 L6207, C6218
CAPSTAN POWER
CAP_PWR
CAP_ERR
REG_2.5V
REG_3V
IC6101, Q6201 L6201, C6202
3V SW REG
IC6101, Q6202 R62006, C6204
2.5V SW REG
CN105
REG_3V
CN109
REG_3V
IC6101, Q6203 L6202, C6207
1.8V SW REG
REG_1.8V
Q6205
VF REG4.8
VF_CTL
ES
Q6206
CN101
VFREG4.8
L6204
M_REG4.8V
REG_4.8V
IC6101, Q6204 L6203, C6210
4.8V SW REG
CN103
SW REG
C6221
L6209
D6206
IC6101, Q6211 L6208
L6210
Q6212
DIF AMP
Q6213
REG 12V
REG_12V
REG_15V
REG_-15V
AL 3V SW REG
IC6101, Q6004 C6004
Q6215
DIF AMP
Q6216
REG -6.5V
REG-6.5V
A B C D E F G H
1 2 3 4 5

4.30 VIDEO SYSTEM BLOCK DIAGRAM


04 CCD
IC5001 (CCD)
Q5001 BUF
OP BLOCK
IRIS_CTL
IC4201 (CDS/AGC/AD)
01 MAIN
CAM_AD0~CAM_AD9
IC4301 (CAMERA_DSP)
AD CONV
KIZU
CLK GEN
DVC IN
DVC I/F
DVC OUT
IWD
Y/C DAC
ENC SENC
RY/GY/BY DAC
CVF
SELECT
DSC I/F
DSC IN /OUT
DSC OUT
ANA I/F
Y/C HNR
AUTO
CPU I/F
CONTROL
EIS FMC
EVR DAC
OSD I/F
MEMO OUT
MEMO IN
TO DV MAIN
TO DV MAIN ANA IN
TO DSC/USB
TO ANA IN
PRE/REC
IC5501 (TG/VDRV)
X5501 54MHz CXO
IC1003 (E²PROM)
IC1002 (RTC)
X1002 32KHz
IC1001 (SYSCON CPU)
X1001 16MHz
IC4851
BRIDGE DRIVER
PULSE GENERATOR
SERIAL-PARARELLE DECODER
IC4802~IC4804
HALL AMP
MOTOR DRIVE AMP
IC4806
OP DRIVE
PC IF
IC1007
IC1006 (ON SCREEN)
TO CAM_DSP
TO VTR_CPU
IC4302 (FILED MEMORY)
06 JACK
JLIP J502
WITHOUT DSC MODEL
PC J504
WITH DSC MODEL
J505 USB
J501
AV IN/OUT
S IN/OUT J503
D1302
IC1303
IC1304
Q1301
AL_3VSYS
TO DSC/USB
IC1008
TO IC1007-5PIN
V OUT
IC3701
75Ω
6dB DRV
Q3701 AMP
TO ANA
Q4302 BUF
Q4301 BUF
02 MONITOR
B/W VF
Q7101 AMP
08 B/W VF
LCD MODULE
B/W VF MODEL
WITH DSC MODEL
SD/MMC CARD
IC7601
IC7603
03 LCD BL
C-VF
C-VF MODEL
VF BL
TO VTR_CPU ANA IN DSC/USB
1 2 3 4 5
A B C D E F G H


0 1 MAIN
IC3001 (DV _ MAIN)
VIDEO I/F (VBID DET RAM)
COMPRESS (DCT.VLC VLD WORK RAM)
OUTER ECC (ENC/DET)
RAM (SUB/AUX)
INNER ECC (ENC/DEC)
FORMATTER (Formatting Sync Detect ID Protect De-formatting)
RAM (CLOCK CONV)
D-RAM I/F
HOST CPU I/F
IEE1394 LINK (ISO/ ASYNC FIFO)
AUDIO (WORK RAM PROGRAM RISC CORE)
(DECK _ DSP)
YSO0
YSO3
BRSO0
BRSO3
OUTH
OUTV
YSI0
YSI3
BRSI0
BRSI3
INH
INV
OSC27I
AD0
AD15
XRST
CPUALE
XCPUDSTB0
XCPUDSTB1
XCPURW
XCPUCS
CPUWAIT
PWMAUDIO
RECCTL
RECDATA
RECCLK
SPA
HSP
HID
TRKREF
FRREF
TPA
TPB
XTPA
XTPB
AILRCK
AIBCK
AIMCK
AODAT0
AODAT1
DOLRCK
DOBCK
DOMCK
DODAT
AIDAT
TO CAM_DSP
TO TG/VDRV
CLK27
TO VTR_CPU
ADDT00
ADDT15
DV_RST
DALE
DWE
DRE
DRWSEL
DV_CS
DV_WAIT
TO SYSCON
V OUT
TO JACK
FSPLLCTL
RECCTL
HSE
RECCLK
SPAIN
TR
FR
IC3501
HID3
PBH
RECH
HID1
REC_DATA
REC_CTL
R_CTL
MONI_CHG
ENV_OUT
PB_MONI
PB_ENV
RECCADT
AGCOUT
REG_GAIN
(TO CAM _ DSP)
TO JIG (CN105)
(PRE/REC)
Y2
X2
X1
Y1
2F
2S
1S
1F
HEAD
CN110
IC3901 (ANA IN)
YSI0
YSI3
CSI0
CSI3
YS00
YS03
CS00
CS03
OUTH
OUTV
INH
INV
TBCCTL
ZCNT
A_SYNC
CSYNC
A_OSD_HD59
HDOUT
CLK
(A/D. D/A CONV)
YSOUT
COUT
CIN
VYIN
TO V OUT
TO CAM DSP (IC4301)
Q3954 BUF
Q3953 AMP
Q3951 BUF
IC3951
C_IN
EXT_V_IN
EXT_Y_IN
(DSC/USB)
WITH DSC MODEL
IC8051
IC8052
IC8001
P_CE/MMC_CS
XIN
XOUT
SCLK
R8003
X8001
IC8007
ADDRESS BUS
DATA BUS
CE1
SCK
SI
SO
YIN
MY7
MY0
MC3
MC0
B-Y
R-Y
IN
CPU IF
AVD
AVD(INT)
2TXD
2RXD
FLD
PORT3
P_VS2
SID
BS
R/W
BCL
BCH
DC
HREQ
HACK
CS
INT
CE
OE
WE
RY/BY
RST
CLKIN
A8~A30
D0~D15
DSC CPU IC8002
RST
BYTE
REG_3.1V
D0~A19
DQ0~DQ14
2M RAM IC8003
FLASH_CE
IC8007
IC8006
USB_CE
A0~A7
AD0~AD7
IC8401 (USB)
D+
D-
RD
WR
RESET
REST
IC1401 (VTR _ CPU)
MONI_CHG
VD
EEP_WRITE
EEP_CLK
EEP_READ
SYS_CLK
SYS_IN
SYS_OUT
MSELECT
SRV_RDY
SRV_RST
SRV_CS
TXD
RXD
OSCI
TO CAM_DSP
TO SYSCON (IC1003)
TO SYSCON
TO SYSCON (IC1001)
(IC1014)
SRV_TX
IF_RX
TO TG/VDRV
CLK_27
DV_RST
DV_CS
DK
DV_WAIT
ADM0
ADM15
AS
RWSEL
RE
WE0
ADDT00
ADDT15
DALE
DRWSEL
DRE
DWE
CLK27SEL
HIDIN
HID1
PBH
RECH
HID_3
SPA
FRP
TSR
FR
TR
TO IC3001
TO IC3201
TO IC3501
TO IC3001
AIMK
AILRCK
AIBCK
AIDAT
AODAT
TO AUDIO
ND_H
PD_L
CLK_OUT
DATA_OUT
AUDIO_CS
S_MUTE
S_SHUT
TO CAM_DSP
L3010
L3011
TPA+
TPA-
TPB+
TPB-
DV IN/OUT
DV J101
1
2
3
4
5
A
B
C
D
E
F
G
H

4.31 AUDIO SYSTEM BLOCK DIAGRAM



01 MAIN (AUDIO)
IC2001
(AUDIO PROCESSOR)
TO DV MAIN
AIDAT
AODAT
AIBCK
AILRCK
AIMCK
C2123
R2127
C2125
R2109
R2113
R2111
C2113
R2107
R2129
C2115
C2007
48
49
47
46
45
44
20
41
29 30 34 35
36
39
37
AIDAT
AODAT
AIBCLK
AILRCK
AIMCK
SDTO
SDTI
BCLK
LRCK
MCLK
ND
PD
HPF ON
OFF
INT
EXT
EQ AMP
HPF AMP
LINE IN Rch
MIC SEL
CLOCK DIVIDER
CONTROL RESISTER I/F
CCLK
CS
DATA
33
32
31
ND_H
PD_L
DATA_CLK
AUDIO_CS
DATA_OUT
A_MUTE
TO SYSCON
A_MUTE
26
50
51
R2103
PRE AMP
Rch ALC AMP
LINE
MIC
EXT MIC Rch
NOT USED
53
INT MIC Rch
54
MIC UNIT
CN106
IN MIC/R
IM_GND
IN MIC/L
3
2
1
MIX
A/D
HPF
AUDIO I/F CTL
D/A
EE/REC
PB
Rch LINE AMP
LINE OUT Rch
21
SW
Q2001
Lch LINE AMP
LINE OUT Lch
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07 JACK
J501 A/V OUT
CN103
CN502
AU_SIG/R
AU_SIG/L
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5
2
INT MIC L ch
59
EXT MIC L ch
60
PRE AMP
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R2104
Lch ALC AMP
Rch HP AMP
HP OUT Rch
24
NOT USED
Lch HP AMP
HP OUT Lch
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SIG
BEEP
BEEPS
ALCS
MIX
AVR OUT
SPK+
SPK-
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02 MONITOR
CN101
CN761
CN765
SPEAKER
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EQ AMP
HPF AMP
HPF OFF
INT
ON
LINE IN Lch
LINE OUT2 R ch
LINE OUT2 L ch
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12
13
14
15
16
17
C2124
R2128
C2126
R2110
R2114
C2112
C2114
R2108
R2130
C2116
C2006
C2018
C2109
R2024
R2023
C2016
TO SYSCON
BUZZER
S_MUTE
SW
Q2004
TO CAM DSP
S_SHUT
5
4
3
2
1
A
B
C
D
E
F
G
H

4.32 VOLTAGE CHARTS

<SYSCON>

MODE PIN NO.	REC	PLAY
IC1001	-	-
IC1002		
1	0	0
2	3.0	3.0
3	1.5	1.5
4	0	0
5	2.9	2.9
6	0.5	0.5
7	0.5	0.5
8	3.1	3.1
IC1003		
1	3.0	3.0
2	0.7	0.7
3	2.9	3.0
4	0	0
5	0.6	0.7
6	3.0	3.0
7	2.9	2.9
8	2.9	2.9
IC1004		
1	1.4	1.4
2	0	0
3	1.3	1.3
4	0	0
5	3.0	3.0
IC1005		
1	0	0
2	3.0	3.0
3	0	0
4	3.0	3.0
5	3.0	3.0
IC1006		
1	2.7	2.7
2	0.5	0.5
3	0	0
4	3.0	3.0
5	3.0	3.0
6	3.0	3.0
7	1.3	1.3
8	1.4	1.4
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	2.9	2.9
20	2.7	2.7
IC1007		
1	3.0	3.0
2	3.0	3.0
3	3.0	3.0
4	3.0	3.0
5	3.0	3.0
6	3.0	3.0
7	0	0
8	3.0	3.0
9	3.0	3.0
10	3.0	3.0
11	1.3	1.3
12	1.5	1.5
13	3.0	3.0
14	3.0	3.0
IC1008		
1	3.0	3.0
2	1.0	1.0
3	0	0
4	0	0
5	0	0.5
6	3.0	3.0
7	0	0
8	3.0	0
IC1009		
1	0	0
2	0	0
3	3.0	3.0
4	3.0	3.0
Q1001		
E	0	0
C	0	0
B	0	0
Q1002		
E	0	0
C	3.0	3.0
B	0.6	0.6
Q1003		
E	0	0
C	0.5	0.5
B	0	0
Q1004		
E	3.1	3.1
C	0	0
B	3.1	3.1
Q1005		
E	0	0
C	3.1	3.1
B	0	0
Q1006		
E	2.9	0
C	2.9	0
B	0	3.0
Q1007		
E	0	0
C	0	3.0
B	3.1	0
Q1301		
E	0	0
C	0	0
B	0	0

<PC IF>

MODE PIN NO.	REC	PLAY
IC1303		
1	3.0	3.0
2	0	0
3	0	0
4	0	0
5	3.0	3.0
IC1304		
1	3.0	3.0
2	0	0
3	0	0
4	0	0
5	3.0	3.0

<VTR CPU>

MODE PIN NO.	REC	PLAY
IC1401	-	-
IC1403		
1	3.0	3.0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	3.0	3.0
8	3.0	3.0
IC1404		
1	-	-
2	2.9	2.9
3	-	-
4	0	0
5	-	-
6	0	0
7	-	-
8	2.9	2.9
Q1401		
1	3.0	3.0
2	3.0	3.0
3	3.0	3.0
Q1402		
1(E)	0	0
2(B)	3.0	3.0
3(E)	3.0	3.0
4(C)	2.7	2.7
5(C)	0	0
Q1403		
1(E)	0	0
2(B)	0	0
3(E)	3.0	3.0
4(C)	0	0
5(C)	3.0	3.0
Q1404		
1	0	0
2	0	0
3	3.0	3.0

<MDA>

MODE PIN NO.	REC	PLAY
IC1601		
1	0	0
2	0.8	0.8
3	0.8	0
4	0	0
5	0.8	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	4.7	4.7
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0.4	0.4
21	0	0
22	0	0
23	0.9	0.9
24	11.0	11.0
25	1.5	1.5
26	0	0
27	1.5	1.5
28	1.5	1.5
29	1.5	1.5
30	1.5	1.5
31	1.5	1.5
32	1.5	1.5
33	1.4	0
34	1.4	0
35	0	0
36	2.9	2.9
37	0	0
38	0.6	0.6
39	0	0.6
40	0	1.2
41	1.5	0
42	0.5	0.7
43	2.9	2.9
44	0	0
45	0	0
46	0	0
47	0.9	2.9
48	0	0
49	2.9	2.9
50	1.9	1.9
51	0	0
52	1.6	1.6
53	0	1.1
54	0.4	0.7
55	0.6	0.6
56	0.7	0.7
57	1.0	1.0
58	0.6	0.6
59	0	0
60	1.0	1.0
61	2.6	0
62	0	1.2
63	0	1.5
64	0	1.5
65	0	1.4
66	0	0
67	0	1.5
68	0.4	0
69	0	0
70	0	0.8
71	0	0.8
72	0	0.8
73	0.8	0
74	1.1	0
75	0	0
76	0	0
77	0	0
78	0	1.7
79	0	0
80	0	0
Q1601		
1(E)	0	0
2(B)	0	0
3(E)	4.8	4.8
4(C)	0	0
5(C)	4.8	4.8

<AUDIO>

MODE PIN NO.	REC	PLAY
IC2001		
1	2.0	2.0
2	2.0	2.0
3	2.0	2.0
4	2.0	2.0
5	1.5	1.5
6	1.5	1.5
7	1.5	1.5
8	0	0
9	3.0	3.0
10	1.5	1.5
11	1.5	1.5
12	1.5	1.5
13	1.5	1.5
14	1.5	1.5
15	1.5	1.5
16	1.5	1.5
17	1.5	1.5
18	1.5	0
19	1.5	2.3
20	2.3	2.3
21	1.5	1.4
22	2.3	2.3
23	2.3	2.3
24	4.7	4.7
25	2.3	2.3
26	0	0
27	2.9	2.9
28	0	0
29	1.5	1.5
30	1.5	1.5
31	1.5	1.7
32	2.9	1.7
33	3.0	3.0
34	1.5	1.5
35	1.5	1.5
36	1.5	1.5
37	3.0	3.1
38	2.4	3.1
39	0	0
40	2.4	2.4

MODE PIN NO.	REC	PLAY
41	0	0
42	0	0
43	4.8	4.8
44	1.5	1.5
45	2.0	2.0
46	2.0	2.0
47	2.0	2.0
48	2.0	2.0
49	2.0	2.0
50	2.0	2.0
51	2.0	2.0
52	2.6	2.6
53	2.0	2.0
54	2.0	2.0
55	4.0	4.0
56	2.0	2.0
57	0	0
58	4.0	4.0
59	2.0	2.0
60	2.0	2.0
61	2.0	2.0
62	2.0	2.0
63	2.0	2.0
64	2.0	2.0
Q2001		
1(E)	0	0
2(B)	0	0
3(C)	0	0
4(E)	0	0
5(B)	0	0
6(C)	0	0
Q2002		
E	4.1	4.1
C	4.8	4.8
B	4.7	4.7
Q2004		
E	0	0
C	0	0
B	0.7	0.7

<DV MAIN>

MODE PIN NO.	REC	PLAY
IC3001	-	-
IC3002		
1	0	0.4
2	0	0
3	0	0
4	0.5	1.5
5	0.7	0
6	2.9	0
7	0	0
8	3.0	2.9
IC3003		
1	3.0	2.9
2	1.0	0.9
3	0	0
4	0	0
5	0	0
6	0.5	1.5
7	2.3	2.3

MODE PIN NO.	REC	PLAY
8	3.0	2.9
IC3004		
1	0.5	0
2	0.5	0
3	0	0
4	0.8	2.9
5	2.9	2.9
IC3006		
1	2.9	2.9
2	0	0
3	0	0
4	0	0
5	2.9	2.9
6	0	0
7	1.0	1.5
8	1.3	0.7
9	1.3	1.3
10	0	0
11	0	0
12	2.9	2.9
13	0	0
14	0	0
15	0.5	0.5
16	0	0

<PRE/REC>

MODE PIN NO.	REC	PLAY
IC3501		
1	0	0
2	1.1	1.1
3	0	0
4	0	0
5	0	2.5
6	3.3	0
7	1.4	0
8	0	0
9	1.6	3.0
10	0	1.6
11	3.0	0
12	0	0
13	4.8	4.8
14	0	0
15	0	0
16	0	0
17	0	0
18	3.7	1.7
19	3.4	1.7
20	3.5	0
21	3.7	1.7
22	0	0
23	3.7	1.7
24	3.5	1.7
25	3.5	1.7
26	3.7	1.7
27	0	0
28	2.3	2.5
29	3.4	1.7
30	3.4	1.7
31	2.4	2.5
32	0	0

MODE PIN NO.	REC	PLAY
33	0	0
34	0	0
35	1.8	1.8
36	0.4	0
37	3.0	3.0
38	0	3.0
39	3.0	3.0
40	1.5	1.5
41	0	3.0
42	3.0	0
43	4.8	4.8
44	2.9	0
45	0	0
46	0	1.9
47	0	2.0
48	4.7	3.0
49	4.4	2.8
50	0.4	1.6
51	1.2	1.2
52	0.8	1.5
53	0	0
54	3.2	2.6
55	2.5	1.9
56	1.1	1.1
57	2.5	1.9
58	2.5	1.3
59	0	0
60	1.2	1.2
61	3.4	1.9
62	2.5	1.9
63	2.5	1.3
64	2.5	1.9

<V OUT>

MODE PIN NO.	REC	PLAY
IC3701		
1	0	0
2	2.3	2.3
3	0	0
4	0	0
5	0	0
6	0	0
7	1.9	1.9
8	0	0
9	2.3	2.3
10	0	0
11	2.0	2.0
12	2.2	2.2
13	4.8	4.8
14	1.8	1.8
15	1.9	1.9
16	4.8	4.8
Q3701		
1(E)	1.1	1.1
2(E)	1.2	0
3(B)	0.6	0.6
4(C)	0	0
5(B)	0	0.5

MODE PIN NO.	REC	PLAY
6(C)	0	0
Q3702		
1(E)	0	0
2(B)	0	0
3(C)	0	0
4(E)	4.7	0
5(B)	4.7	4.8
6(C)	0	0
Q3703		
E	0	0
C	4.8	4.8
B	0	0

<ANA IN>

MODE PIN NO.	REC	PLAY
IC3901		
1	0	0
2	2.9	2.9
3	1.0	1.0
4	0	0
5	0	0
6	1.6	1.6
7	0.6	0.6
8	1.0	1.0
9	0	0
10	2.9	2.9
11	0.4	0.4
12	0	0
13	0	0
14	3.0	3.0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	1.8	1.8
24	2.8	2.8
25	1.5	1.5
26	1.0	0.9
27	0.9	0.9
28	0.9	0.9
29	1.4	1.4
30	0	0
31	3.0	3.0
32	1.5	1.5
33	1.2	1.2
34	1.1	1.1
35	0.8	0.8
36	2.8	2.8
37	1.5	1.5
38	0.9	0.9
39	0.9	0.9
40	0.9	0.9
41	1.4	1.4
42	1.1	1.1

MODE PIN NO.	REC	PLAY
43	1.1	1.1
44	1.1	1.1
45	0.8	0.8
46	0	0
47	0	0
48	0	0
49	0.4	0.4
50	2.7	2.7
51	2.8	2.8
52	0	0
53	1.8	1.8
54	1.2	1.7
55	3.1	3.1
56	0	0
57	0	0
58	3.0	3.0
59	0	0
60	0	0
61	1.4	1.4
62	0	0
63	3.0	0
64	0	0
65	0	0
66	0	0
67	0	0
68	0	0
69	0	0
70	0	0
71	0	0
72	0	0
73	3.0	3.0
74	1.1	1.1
75	0	0
76	0	0
77	1.7	1.7
78	0	0
79	1.1	1.1
80	0.5	0.5
IC3951		
1	3.0	3.0
2	1.9	1.9
3	4.7	4.8
4	1.7	1.7
5	0	0
6	2.2	2.2
Q3951		
1(E)	0	0
2(B)	0.4	0
3(C)	0	0
4(E)	0	2.0
5(B)	1.4	0
6(C)	4.8	4.8
Q3952		
E	0	0
C	0	0
B	3.0	3.0
Q3953		
1(E)	0	0
2(B)	0.4	0.4
3(C)	0	0
4(E)	4.8	0
5(B)	4.8	4.8
6(C)	4.8	4.8

MODE PIN NO.	REC	PLAY
Q3954		
E	0	0
C	4.8	4.8
B	0	0

<CAM DSP>

MODE PIN NO.	REC	PLAY
IC4201		
1	0	0
2	1.1	0
3	1.1	0
4	1.0	0
5	0.7	0
6	0.7	0
7	2.2	3.0
8	0.5	0
9	0.7	0
10	0.4	0
11	0	0
12	0	0
13	0	0
14	0	0
15	2.9	3.0
16	1.2	0
17	2.8	0
18	2.1	0
19	0	0
20	2.4	0
21	0	0
22	0	0
23	3.0	0
24	0	0
25	0	0
26	1.9	0
27	1.4	0
28	1.9	0
29	2.1	0
30	0	0
31	3.0	3.0
32	1.9	0
33	0.9	0
34	1.4	0
35	1.2	0
36	0	0
37	0	0
38	3.0	3.0
39	0	0
40	0	0
41	3.0	3.0
42	0	0
43	3.0	3.0
44	3.0	0
45	0	1.5
46	3.0	3.0
47	0	0
48	0	0
IC4202		
1	4.8	4.8
2	0	0
3	1.2	1.2
4	3.0	3.0
5	4.8	4.8
IC4301	-	-
IC4302		
1	0	0
2	0	1.4
3	1.4	0.9
4	0.9	0.9
5	0.9	0.9
6	0.9	0.9
7	0.8	0.8
8	1.2	1.2
9	1.2	1.3
10	1.8	1.9
11	1.0	1.1
12	1.2	1.0
13	1.2	1.1
14	1.3	1.1
15	1.3	1.4
16	0	0
17	2.7	2.6
18	2.9	2.9
19	0	3.0
20	0	0
21	3.0	3.0
22	2.7	2.7
23	2.7	2.7
24	0	0
25	1.3	1.5
26	1.5	1.4
27	1.4	1.3
28	1.3	1.3
29	1.2	1.2
30	1.8	1.8
31	1.5	1.5
32	1.4	1.3
33	1.1	1.1
34	1.2	1.3
35	1.1	0
36	1.1	1.2
37	1.6	1.6
38	0	0
Q4301		
1(E)	0.9	0.9
2(E)	0.9	0.9
3(B)	0	0
4(C)	0	0
5(B)	0	0
6(C)	0	0
Q4302		
1(E)	1.2	1.2
2(E)	0	0.9
3(B)	0	0
4(C)	0	0
5(B)	0.6	0.6
6(C)	0	0

<OP DRIVE>

MODE PIN NO.	REC	PLAY
IC4802		
1	2.9	2.9
2	2.6	2.6
3	2.6	2.6
4	0	0
5	2.6	2.6
6	2.6	2.6
7	2.6	2.6
8	4.7	4.7
IC4803		
1	1.0	1.0
2	0	0
3	0	0
4	0	0
5	2.6	2.6
6	2.6	2.6
7	2.4	3.3
8	4.7	4.8
IC4804		
1	2.2	0
2	2.4	3.0
3	2.4	2.9
4	0	0
5	1.8	3.0
6	1.8	3.0
7	1.2	0
8	4.7	4.8
IC4806		
1	2.4	3.0
2	2.4	3.0
3	2.4	3.0
4	0	0
5	3.0	3.0
6	0.6	0
7	0.6	0
8	3.0	3.0
IC4851		
1	0	0
2	0.6	0.6
3	0	0.4
4	0.4	0
5	0	0.4
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	0	0
21	0.7	0
22	0	0
23	4.8	4.8
24	0	0
25	0	0
26	0	0
27	4.8	4.8
28	0	0
29	0	0
30	0	0
31	3.0	3.0
32	0	0
33	0	0
34	1.3	1.5
35	3.0	3.0
36	1.4	1.4
37	1.4	1.4
38	3.1	3.1
Q4801		
E	0	0
C	2.3	2.3
B	1.0	1.0
Q4851		
E	0	0
C	3.8	3.8
B	0	0

<TG/VDRV>

MODE PIN NO.	REC	PLAY
IC5501		
1	-0.5	-0.7
2	2.4	0
3	2.9	0
4	2.9	2.9
5	0	0
6	2.9	2.9
7	0	0
8	0.5	0
9	0	0
10	2.9	2.9
11	1.4	0
12	2.9	2.9
13	0	0
14	1.2	0
15	0	0
16	2.9	2.9
17	2.2	0
18	2.2	0
19	2.2	0
20	0	0
21	0	0
22	0	0
23	0	0
24	2.9	2.9
25	1.3	0
26	3.0	3.0
27	0	0
28	1.2	1.8
29	0	0
30	1.3	1.5
31	0	0
32	0	0
33	2.9	2.9
34	1.5	0
35	1.2	0
36	2.9	0
37	2.9	0
38	3.0	3.0
39	0	0
40	0	0
41	-6.3	0
42	0	11.9
43	11.9	11.9
44	-6.2	11.9
45	-6.6	-6.7
46	-6.6	0
47	0	0
48	2.9	0

<REG>

MODE PIN NO.	REC	PLAY
IC6001		
1	8.0	8.0
2	10.4	10.4
3	0	0
4	0	0
IC6101		
1	3.1	3.1
2	3.1	3.1
3	3.1	3.1
4	1.5	1.5
5	3.1	3.1
6	0	0
7	1.3	1.3
8	11.0	11.0
9	1.0	1.0
10	1.2	1.2
11	2.1	2.1
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	2.2	2.2
20	0.9	0.9
21	0	0
22	2.2	2.2
23	1.0	1.0
24	0.6	0.6
25	1.0	1.0
26	0.5	0.5
27	1.0	1.0
28	0.8	0.8
29	1.0	1.0
30	0.9	0.9
31	0	0
32	0	0
33	0.5	0.5
34	0	0
35	0	0
36	0.5	0.5
37	0.8	0.8
38	0	0
39	1.0	1.0

MODE PIN NO.	REC	PLAY
40	0	0
41	2.4	2.4
42	1.1	1.1
43	0	0
44	2.1	2.1
45	2.1	2.1
46	2.1	2.1
47	8	8
48	1.0	1.0
49	1.1	1.1
50	2.1	2.1
51	11.0	11.0
52	0	0
53	10.2	10.2
54	9.4	9.4
55	4.7	4.7
56	6.1	6.1
57	9.3	9.3
58	7.9	7.9
59	0	0
60	11.0	11.0
61	0	0
62	10.3	10.3
63	1.3	1.3
64	1.0	1.0
Q6001		
E	0	0
C	0	0
B	3.0	3.0
Q6002		
D	10.4	10.4
S	0	0
G	0	0
Q6003		
D	0	0
S	4.1	4.1
G	0	3.1
Q6004		
E	11.0	11.0
C	3.0	3.0
B	10.4	10.4
Q6101		
D	0	0
S	0	0
G	0	0
Q6102		
D	0	0
S	0	0
G	3.0	3.0
Q6201		
D	3.0	3.0
S	11.0	11.0
G	7.9	7.9
Q6202		
E	0	3.0
C	2.5	2.5
B	2.3	2.3
Q6203		
1(D)	1.8	1.8
2(D)	1.8	1.8
3(G)	9.3	9.3
4(S)	11.0	11.0
5(D)	1.8	1.8

MODE PIN NO.	REC	PLAY
6(D)	1.8	1.8
Q6204		
D	4.8	4.8
S	11.0	11.0
G	6.2	6.2
Q6205		
E	4.8	4.8
C	0	0
B	4.8	4.8
Q6206		
E	0	0
C	4.8	4.8
B	0	0
Q6207		
E	0	0
C	4.8	4.8
B	0	0
Q6208		
1(D)	1.7	1.7
2(D)	1.7	1.7
3(G)	9.4	9.4
4(S)	11.0	11.0
5(D)	1.7	1.7
6(D)	1.7	1.7
Q6210		
1(D)	0.9	0.9
2(D)	0.9	0.9
3(G)	10.2	0
4(S)	11.0	11.0
5(D)	0.9	0.9
6(D)	0.9	0
Q6211		
D	0	0
S	11.0	11.0
G	4.7	4.7
Q6212		
1(E)	4.3	4.3
2(B)	4.8	4.8
3(C)	15.0	15.0
4(E)	0	4.3
5(B)	5.0	4.9
6(C)	14.4	14.4
Q6213		
E	15.0	15.0
C	11.9	11.9
B	14.4	14.4
Q6214		
E	0	0
C	15.0	15.0
B	0	-1.1
Q6215		
1(E)	-6.0	-6.1
2(B)	-6.5	-6.6
3(C)	-15.3	-15.3
4(E)	-6.1	-6.1
5(B)	-6.6	-6.7
6(C)	-13.3	-15.2
Q6216		
E	-13.9	-15.3
C	-6.6	-6.7
B	-13.9	-15.2
Q6217		
1(E)	0	0

MODE PIN NO.	REC	PLAY
2(B)	0	0
3(C)	0	0
4(E)	0	11.0
5(B)	11.0	11.0
6(C)	11.0	11.0
Q6701		
1(D)	0	0
2(D)	0	0
3(G)	11.0	11.0
4(S)	11.0	11.0
5(D)	0	0
6(D)	0	0

<DSC/USB>

MODE PIN NO.	REC	PLAY
IC8001		
1	1.0	1.0
2	1.0	1.0
3	1.0	1.0
4	1.0	1.0
5	1.0	1.0
6	1.0	1.0
7	1.0	1.0
8	1.0	1.0
9	1.0	1.0
10	0	0
11	0.7	0.7
12	0.6	0.6
13	1.5	1.6
14	0.4	0.4
15	0.4	0.4
16	0.4	0.4
17	0.4	0
18	0	0
19	1.0	1.0
20	0	0
21	0	0
22	0.5	0.5
23	0.4	0.4
24	0.4	0.4
25	0.4	0.4
26	0.4	0.4
27	0.4	0.4
28	0	0
29	0	0
30	1.0	0
31	1.0	1.0
32	0	1.0
33	1.0	1.0
34	0	1.0
35	1.0	1.0
36	1.0	1.0
37	0	0
38	0.7	0.7
39	0.7	0.7
40	0.7	0.7
41	0.7	1.0
42	1.0	1.0

MODE PIN NO.	REC	PLAY
43	1.0	1.0
44	1.0	1.0
45	0	0
46	0.4	0.4
47	0.4	0.4
48	0.4	0.4
49	0.4	0.4
50	0.4	0.4
51	0.4	0.4
52	0.4	0.4
53	0.4	0.4
54	0	0
55	1.0	1.0
56	0.4	0.4
57	0.4	0.4
58	0.4	0.4
59	0.4	0.4
60	0.4	0.4
61	0	0.4
62	0.4	0.4
63	0.4	0.4
64	0.6	0.6
65	0.6	0.6
66	0.6	0
67	0.6	0.6
68	0.7	0.7
69	0.7	0.7
70	0.7	0.7
71	0.7	0.7
72	0	0
73	1.0	1.0
74	1.0	1.0
75	1.0	1.0
76	1.0	1.0
77	1.0	1.0
78	1.0	1.0
79	1.0	1.0
80	0	0
81	0	0
82	0.8	0.8
83	0.8	0.8
84	0.6	0.6
85	0	0
86	0.6	0.6
87	1.0	1.0
88	1.0	1.0
89	0	0
90	0	0
91	0	0
92	0	0
93	1.0	1.0
94	0	0
95	1.0	1.0
96	0.5	0.5
97	1.0	1.0
98	0	0
99	1.0	1.0
100	1.0	1.0
101	1.0	1.0
102	1.0	1.0
103	1.0	1.0
104	1.0	1.0
105	1.0	1.0

MODE PIN NO.	REC	PLAY
106	1.0	1.0
107	1.0	1.0
108	1.0	1.0
109	0	0
110	0	0
111	1.0	1.0
112	1.0	1.0
113	1.0	1.0
114	0	0
115	1.0	1.0
116	1.0	1.0
117	0.8	0.8
118	0	0
119	0	0
120	0	0
121	0	0
122	0	0
123	0	0
124	0	0
125	0	0
126	0	0
127	1.0	1.0
128	1.0	1.0
129	1.0	1.0
130	1.0	1.0
131	0.7	0.7
132	0	0
133	0	0
134	0	0
135	0	0
136	0	0
137	0	0
138	0	0
139	0	0
140	0	0
141	0	0
142	0	0
143	0	0
144	0	0
IC8002		
1	1.0	1.0
2	0	1.0
3	1.0	1.0
4	1.0	1.0
5	1.0	1.0
6	0	0
7	1.0	1.0
8	0	1.0
9	0	1.0
10	1.0	1.0
11	1.0	1.0
12	1.0	1.0
13	0	1.0
14	1.0	1.0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0.5	0.5
21	0.5	0.5
22	1.0	1.0
23	1.0	1.0

MODE PIN NO.	REC	PLAY
24	1.0	1.0
25	0	0
26	1.0	1.0
27	1.0	1.0
28	1.0	1.0
29	1.0	1.0
30	1.0	1.0
31	0	0
32	0.8	0.6
33	0.8	0.6
34	0.8	0.6
35	0.8	0.6
36	1.0	1.0
37	0	1.0
38	1.0	1.0
39	1.0	1.0
40	1.0	1.0
41	1.0	1.0
42	0	0
43	0	0
44	1.0	1.0
45	1.0	1.0
46	0.9	0.6
47	0.9	0.6
48	0.9	0.6
49	0.9	0.6
50	0	0
51	1.0	1.0
52	1.0	1.0
53	1.0	1.0
54	1.0	1.0
55	1.0	1.0
56	0	0
57	1.3	1.0
58	1.0	1.0
59	0	0
60	0	0
61	1.0	1.0
62	1.0	1.0
63	1.0	1.0
64	1.0	1.0
65	0	0
66	0	0
67	1.0	1.0
68	1.0	1.0
69	1.0	1.0
70	1.0	1.0
71	1.0	1.0
72	1.0	1.0
73	0	1.0
74	0	1.0
75	1.0	0
76	0	1.0
77	0	1.0
78	0	1.0
79	0	1.0
80	1.0	1.0
81	1.0	0
82	0	0
83	1.0	1.0
84	0	0
85	1.0	1.0
86	1.0	1.0

MODE PIN NO.	REC	PLAY
87	1.0	1.0
88	1.0	1.0
89	1.0	1.0
90	0	0
91	1.0	1.0
92	0	0
93	1.0	1.0
94	0	1.0
95	1.0	1.0
96	0	0
97	0	0
98	0	0
99	0	0
100	0	0
IC8003		
1	1.0	1.0
2	1.0	1.0
3	1.0	1.0
4	1.0	1.0
5	1.0	1.0
6	1.0	1.0
7	1.0	1.0
8	1.0	1.0
9	1.0	1.0
10	0	0
11	1.0	1.0
12	0	0
13	0	0
14	0	0
15	0.7	0.7
16	1.0	1.6
17	1.0	1.0
18	1.0	1.0
19	1.0	1.0
20	1.0	1.0
21	1.0	0
22	1.0	1.0
23	1.0	1.0
24	1.0	1.0
25	1.0	1.0
26	1.0	1.0
27	0	0
28	1.0	1.0
29	0	0
30	0	0
31	1.0	1.0
32	0.9	0.7
33	1.0	1.0
34	0.9	0.7
35	1.0	1.0
36	0.8	0.8
37	1.0	1.0
38	0	0
39	0.9	0.7
40	0	0
41	0.9	0.7
42	0	0
43	0.9	0.7
44	0	0
45	0.9	0.7
46	0	0
47	1.0	1.0
48	1.0	1.0

MODE PIN NO.	REC	PLAY
IC8004		
1	4.8	0
2	0	0
3	0	0
4	0	0
5	1.0	1.0
IC8006		
1	0.5	0.5
2	0.5	0.5
3	1.0	1.0
4	0	0
5	0	0
6	0.6	0.6
7	0.6	0.6
8	1.0	1.0
IC8007		
1	1.0	1.0
2	1.0	1.0
3	1.0	1.0
4	0	0
5	0	0
6	1.0	1.0
7	1.0	1.0
8	1.0	1.0
IC8051		
1	0.7	0.7
2	1.0	1.0
3	0	0
4	1.0	1.0
5	1.0	1.0
IC8052		
1	0.5	0.5
2	0	0
3	0	0
4	0	0
5	0.7	0.7
6	0	0
7	0	0
8	1.0	1.0
IC8401	-	-
IC8402		
1	0	0
2	0	0
3	0	0
4	0	0
Q8001		
E	4.8	4.8
C	1.0	1.0
B	4.8	4.8
Q8401		
E	3.3	3.3
C	0	3.3
B	1.5	1.5

<JACK>

MODE PIN NO.	REC	PLAY
IC501		
1	1.9	1.9
2	1.9	1.9
3	1.9	1.9
4	0	0
5	1.9	1.9
6	1.9	1.9
7	1.4	1.4
8	4.8	4.8
IC502		
1	0	0
2	0	0
3	4.8	4.8
4	4.8	4.8
Q501		
E	0	0
C	4.2	4.2
B	-	-

<B/W VF>

MODE PIN NO.	REC	PLAY
IC7101	-	-
1Q7101	-	-

<MONITOR>

MODE PIN NO.	EE
IC7601	
1	0
2	7.1
3	2.4
4	2.4
5	2.4
6	2.4
7	2.4
8	2.4
9	2.4
10	0
11	0
12	5.9
13	0
14	6.0
15	6.0
16	6.0
17	6.0
18	6.0
19	6.0
20	1.7
21	1.4
22	0
23	1.2
24	0.4
25	0
26	1.1
27	0.9
28	1.3
29	2.9
30	1.1
31	0
32	0.5
33	0
34	0
35	0
36	3.0
37	0
38	0
39	3.0
40	0.9
41	1.5
42	2.9
43	2.9
44	0
45	2.9
46	2.7
47	2.4
48	0
IC7602	
1	11.8
2	0.5
3	0.5
4	0
5	4.8
6	4.8
7	7.1
8	11.9
IC7603	
1	0.7
2	3.1
3	0
4	3.0

MODE PIN NO.	EE
5	3.0
6	0.7
7	0
8	0
IC7604	
1	1.0
2	3.0
3	2.3
4	1.0
5	3.1
6	0
7	0
8	0
9	1.0
10	0
11	0
12	1.0
13	0
14	3.0
Q7601	
E	-9.1
C	0
B	-8.6
Q7602	
E	0
C	0
B	-8.5
Q7603	
E	-8.6
C	0
B	-8.2
Q7604	
E	-8.6
C	-14.7
B	-9.1
Q7605	
E	2.9
C	2.9
B	0
Q7606	
E	0
C	0
B	2.9
Q7607	
1(E)	0
2(B)	6.3
3(C)	0
4(E)	0
5(B)	5.7
6(C)	11.9
Q7608	
E	0
C	0
B	3.1
Q7609	
E	0
C	4.7
B	0
Q7610	
E	4.8
C	1.4
B	4.7

<LCD BL>

MODE PIN NO.	EE
IC751	
1	0
2	4.5
3	0
4	0
5	3.1
6	0
7	0
8	0
9	0
10	0
Q7501	
E	0
C	4.5
B	0.4
Q7502	
E	0
C	4.5
B	0.4
Q7503	
E	4.6
C	0
B	0
Q7504	
E	0
C	0
B	0.7

<CCD>

MODE PIN NO.	EE
Q5001	
E	0
C	8.1
B	0

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GR-DVL510U/815U/817U/915U

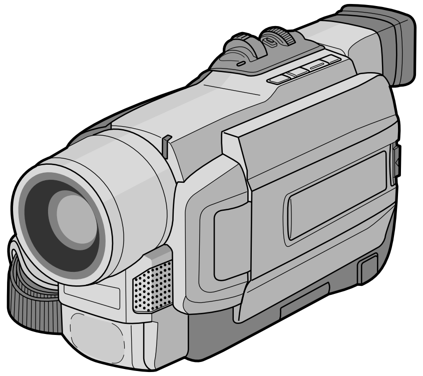
No. 86601

JVC

SERVICE MANUAL

DIGITAL VIDEO CAMERA

GR-DVL510U/815U/817U/915U



Mini DV NTSC

DSC DIGITAL STILL CAMERA

SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-DVL310/510/815/915)*

Camcorder

For General

Power supply : DC 11.0 V ⎓ (Using AC Adapter)
DC 7.2 V ⎓ (Using battery pack)
Power consumption
  LCD monitor off, viewfinder on : Approx. 4.3 W
  LCD monitor on, viewfinder off : Approx. 5.3 W
  Video light : Approx. 3.5 W
Dimensions (W x H x D) : 83 mm x 97 mm x 188 mm (3-5/16" x 3-7/8" x 7-7/16")
(with the LCD monitor closed and the viewfinder pushed down)
Weight : Approx. 610 g (1.4 lbs) (GR-DVL915)
Approx. 600 g (1.4 lbs) (GR-DVL815)
Approx. 590 g (1.3 lbs) (GR-DVL510/DVL310)
Operating temperature : 0°C to 40°C (32°F to 104°F)
Operating humidity : 35% to 80%
Storage temperature : –20°C to 50°C (–4°F to 122°F)
Pickup : 1/4" CCD
Lens : F 1.8, f = 3.6 mm to 36 mm, 10:1 power zoom lens
Filter diameter : ø37 mm
LCD monitor : 3.5" diagonally measured, LCD panel/TFT active matrix system (GR-DVL915)
3" diagonally measured, LCD panel/TFT active matrix system (GR-DVL815)
2.5" diagonally measured, LCD panel/TFT active matrix system (GR-DVL510/DVL310)
Viewfinder : Electronic viewfinder with 0.44" color LCD (GR-DVL915/DVL815)
Electronic viewfinder with 0.24" black/white LCD (GR-DVL510/DVL310)
Speaker : Monaural

For Digital Video Camera

Format : DV format (SD mode)
Signal format : NTSC standard
Recording/Playback format : Video: Digital component recording
: Audio: PCM digital recording, 32 kHz 4-channel (12-bit), 48 kHz 2-channel (16-bit)
Cassette : Mini DV cassette
Tape speed : SP: 18.8 mm/s
LP: 12.5 mm/s
Maximum recording time (using 80 min. cassette) : SP: 80 min.
LP: 120 min.

For Digital Still Camera (GR-DVL915/DVL815/DVL510 only)

Storage media : SD Memory Card/MultiMediaCard
Compression system : JPEG (compatible)
File size : VGA (640 x 480 pixels)
Picture quality : 2 modes (FINE/STANDARD)
Approximate number of storable images
  with memory card [8 MB] (provided with GR-DVL510 only)
  FINE : 100
  STANDARD : 200
  with memory card [16 MB] (provided with GR-DVL915/DVL815 only)
  FINE : 200
  STANDARD : 400
  with memory card [32 MB] (optional)
  FINE : 400
  STANDARD : 800
  with memory card [64 MB] (optional)
  FINE : 800
  STANDARD : 1600

For Connectors

S-Video
  Output : Y : 1 V (p-p), 75 Ω, analog
C : 0.29 V (p-p), 75 Ω, analog
  Input (GR-DVL915 only) : Y : 0.8 V (p-p) – 1.2 V (p-p), 75 Ω, analog
C : 0.2 V (p-p) – 0.4 V (p-p), 75 Ω, analog
AV
  Video output : 1 V (p-p), 75 Ω, analog
  Video input (GR-DVL915 only) : 0.8 V (p-p) – 1.2 V (p-p), 75 Ω, analog
  Audio output : 300 mV (rms), 1 kΩ, analog, stereo
  Audio input (GR-DVL915 only) : 300 mV (rms), 50 kΩ, analog, stereo
DV
  Output : 4-pin, IEEE 1394 compliant
  Input : 4-pin, IEEE 1394 compliant
USB (GR-DVL915/DVL815/DVL510 only) : 5-pin
PC (DIGITAL PHOTO) (GR-DVL310 only) : ø2.5 mm, 3-pole
EDIT (GR-DVL915/DVL815/DVL510 only) : ø3.5 mm, 2-pole
JLIP (GR-DVL310 only) : ø3.5 mm, 4-pole

AC adapter AP-V10U

Power requirement
  U.S.A. and Canada : AC 120 V ∿, 60 Hz
  Other countries : AC 110 V to 240 V ∿, 50 Hz/60 Hz
Output : DC 11 V ⎓ , 1 A
Dimensions (W x H x D) : 59 mm x 31 mm x 84 mm (2-3/8" x 1-1/4" x 3-5/16")
Weight : Approx. 130 g (0.29 lbs.)

Specifications shown are for SP mode unless otherwise indicated. E & O.E. Design and specifications subject to change without notice.

Printed in Japan

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No. 86601
January 2001

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The following table lists the differing points between Models GR-DVL510U,GR-DVL815U,GR-DVL817U and GR-DVL915U in this series.

	GR-DVL510U	GR-DVL815U	GR-DVL817U	GR-DVL915U
E.VF UNIT	B/W	COLOR	B/W	COLOR
LCD MONITOR	2.5”	3.0”	3.5”	3.5”
SIDE LED INDICATER	NOT USED	USED	USED	USED
ANALOG INPUT	NOT USED	NOT USED	NOT USED	USED
REMOTE CONTROL	RM-V715U	RM-V716U	RM-V716U	RM-V716U
REMORY CARD	USED(8MB)	USED(16MB)	USED(8MB)	USED(16MB)
EDITING CABLE	NOT USED	USED	USED	USED

Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

● Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the ⚠ symbol and shaded (▒) parts are critical for safety.
   Replace only with specified part numbers.
   Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

3. Fuse replacement caution notice.
   Caution for continued protection against fire hazard.
   Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers
   4) Insulation sheets for transistors
   5) Barrier

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

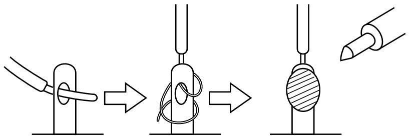


Fig.1

7. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

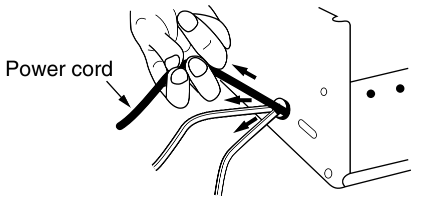


Fig.2

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)
    In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission.
    Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits.
    Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector
    In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

    1) Connector part number : E03830-001
    2) Required tool : Connector crimping tool of the proper type which will not damage insulated parts.
    3) Replacement procedure
    (1) Remove the old connector by cutting the wires at a point close to the connector.
    Important : Do not reuse a connector (discard it).

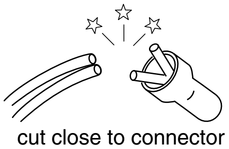


Fig.3

(2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

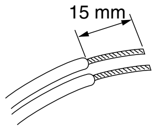


Fig.4

(3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

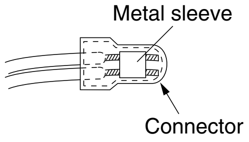


Fig.5

(4) As shown in Fig.6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

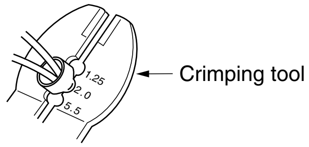


Fig.6

(5) Check the four points noted in Fig.7.

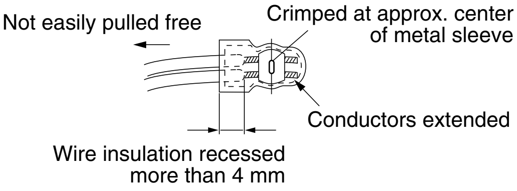

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig.7

● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. **Insulation resistance test**
   Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

2. **Dielectric strength test**
   Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

3. **Clearance distance**
   When replacing primary circuit components, confirm specified clearance distance (d), (d’) between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

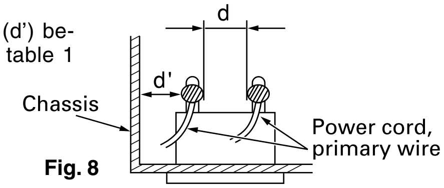


Fig. 8

4. **Leakage current test**
   Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
   Measuring Method : (Power ON)
   Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

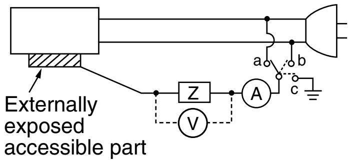


Fig. 9

5. **Grounding (Class 1 model only)**
   Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).
   Measuring Method:
   Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.

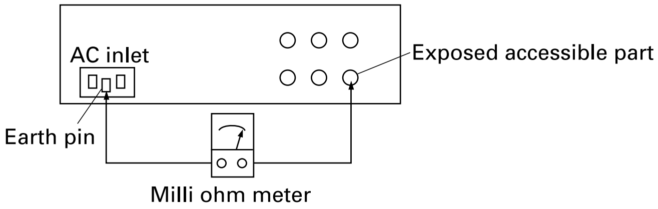


Fig. 10

Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	Z ≦ 0.1 ohm
Europe & Australia	Z ≦ 0.5 ohm

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	R ≧ 1 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3 mm
100 to 240 V			AC 1.5 kV 1 miute	d, d' ≧ 4 mm
110 to 130 V	USA & Canada	1 MΩ ≦ R ≦ 12 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3.2 mm
110 to 130 V 200 to 240 V	Europe & Australia	R ≧ 10 MΩ/500 V DC	AC 3 kV 1 minute (Class Ⅱ) AC 1.5 kV 1 minute (Class Ⅰ)	d ≧ 4 mm d' ≧ 8 mm (Power cord) d' ≧ 6 mm (Primary wire)

Table 1 Specifications for each region

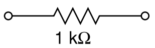
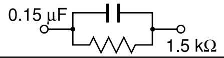
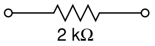
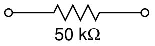
AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	 1 kΩ	i ≦ 1 mA rms	Exposed accessible parts
110 to 130 V	USA & Canada	 0.15 µF 1.5 kΩ	i ≦ 0.5 mA rms	Exposed accessible parts
110 to 130 V 220 to 240 V	Europe & Australia	 2 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Antenna earth terminals
		 50 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Other terminals

Table 2 Leakage current specifications for each region

Note: These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

SECTION 1
DISASSEMBLY

1.1 BEFORE ASSEMBLY AND DISASSEMBLY

1.1.1 Precautions

1. Be sure to remove the power supply unit prior to mounting and soldering of parts.
2. When removing a component part that needs to disconnect the connector and to remove the screw for removing itself, first disconnect the connecting wire from the connector and then remove the screw beforehand.
3. When connecting and disconnecting the connectors, be careful not to damage the wire.
4. Carefully remove and handle the part to which some spacer or shield is attached for reinforcement or insulation.
5. When replacing chip parts (especially IC parts), desolder completely first (to prevent peeling of the pattern).
6. Tighten screws properly during the procedures.
   Unless specified otherwise, tighten screws at a torque of 0.069N•m(0.7kgf•cm).

1.1.2 Assembly and disassembly

STEP No.	PART	Fig.No.	POINT	NOTE
①	COVER(ZOOM) ASSY	Fig.1-3-1	(S①a),(S①b),2(L①a),2(L①b)	-
②	UPPER CASE ASSY (Inc.E.VF UNIT (B/W,COLOR), SPEAKER/ MONITOR)	Fig.1-3-2	(S②a),(S②b),(L②),(S②c) 2(S②a),(S②d),4(S②a) CAP(DC JACK) ☆CN(2a)	NOTE②

(1) (2) (3) (4) (5)

(1) Indicate the disassembly steps. When assembling, perform in the reverse order of these steps. This number corresponds to the number in the disassembly diagram.
(2) Indicates the name of disassembly/assembly parts.
(3) Indicates the number in the disassembly diagram.
(4) Indicates parts and points such as screws, washers, springs which must be removed during disassembly/assembly.

Symbol	Name, Point
S	Screw
L	Lock, Pawl, Hook
SD	Soldering
☆(Others)	Connector, Cover, Bracket, etc.

(Example)

- 2 (S1) : Remove the two screws (S1) for removing the part 1.
- CN A : Disconnect the connector A.
- SD1 : Unsolder at the point SD1.

(5) Precautions on disassembly/assembly.

1.1.3 Destination of connectors

Note: *Three kinds of double-arrows in connection tables respectively show kinds of connector/wires.*

↔ : Wire
⇔ : Flat wire
⬌ : Board to Board connector

[Example]

CONN. No.	CONNECTOR					Pin No.
(2a)	MAIN	CN101	⇔	MONITOR	CN761	50

1.1.4 Disconnection of Connectors (Wires)

Connector

Pull both ends of the connector in the arrow direction, remove the lock and disconnect the flat wire.

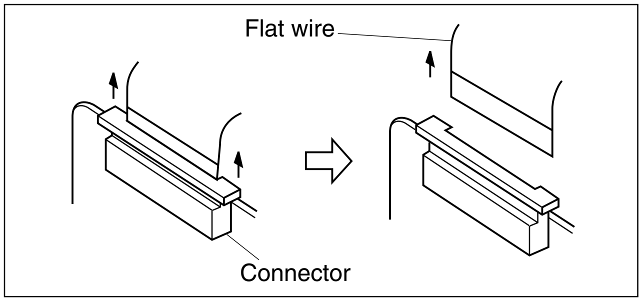


Fig. 1-1-1 Connector 1

Extend the locks in the direction of the arrow for unlocking and then pull out the wire. After removing the wire, immediately restore the locks to their original positions because the locks are apt to come off the connector.

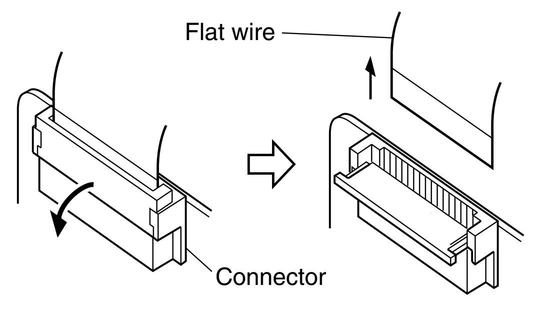


Fig. 1-1-2 Connector 2

B-B connector

Pull the board by both the sides in the direction of the arrow for disconnecting the B-B connector.

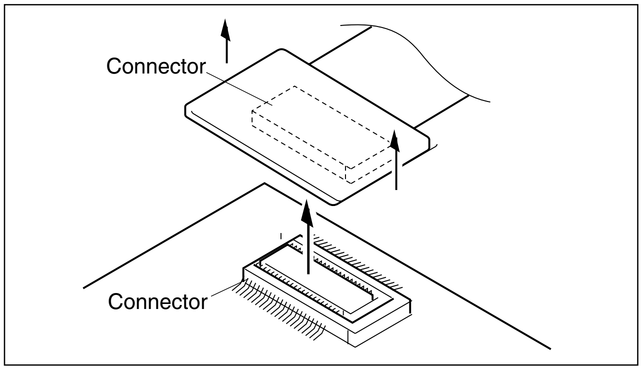


Fig. 1-1-3 Connector 3

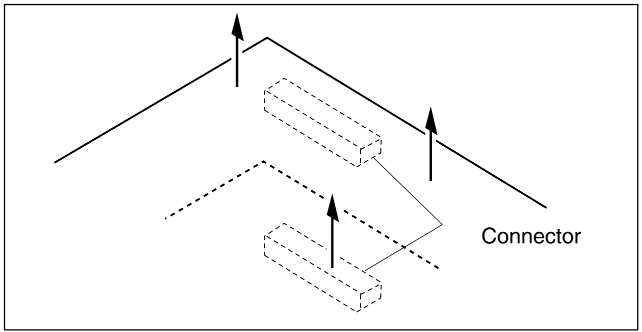


Fig. 1-1-4 Connector 4

1.2 JIGS AND TOOLS REQUIRED FOR DISASSEMBLY, ASSEMBLY AND ADJUSTMENT

1.2.1 Tools required for adjustments

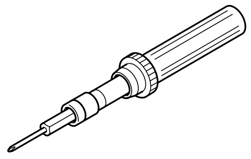
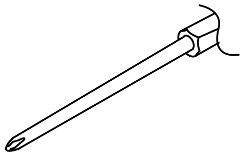
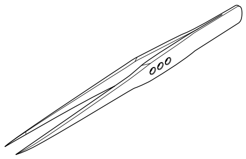
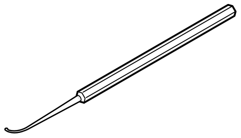
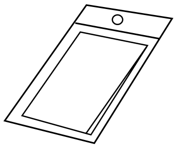
1 Torque Driver YTU94088	2 Bit YTU94088-003
	
3 Tweezers P-895	4 Chip IC Replacement Jig PTS40844-2
	
5 Cleaning Cloth KSMM-01	
	

Table 1-2-1

1. **Torque driver**
   Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.
2. **Bit**
   This bit is slightly longer than those set in conventional torque drivers.
3. **Tweezers**
   To be used for removing and installing parts and wires.
4. **Chip IC replacement jig**
   To be used for adjustment of the camera system.
5. **Cleaning cloth**
   Recommended cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

1.3 DISASSEMBLY/ASSEMBLY OF CABINET PARTS AND BOARD ASSEMBLY

1.3.1 Disassembly flow chart

This flowchart indicates the disassembly step for the cabinet parts and board assembly in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order.

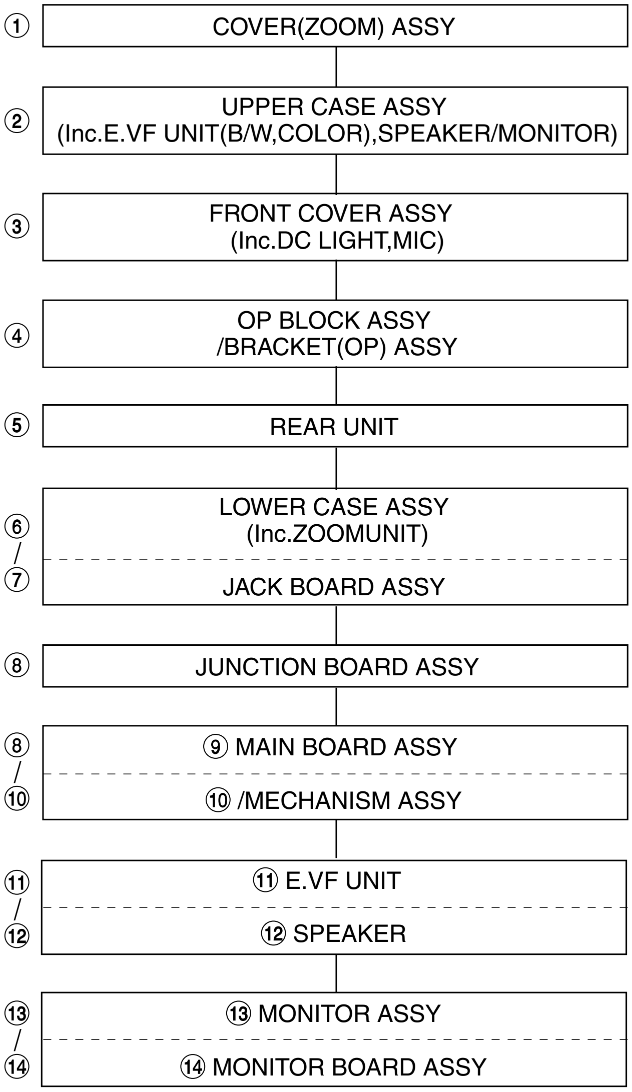

① COVER(ZOOM) ASSY
② UPPER CASE ASSY (Inc.E.VF UNIT(B/W,COLOR),SPEAKER/MONITOR)
③ FRONT COVER ASSY (Inc.DC LIGHT,MIC)
④ OP BLOCK ASSY /BRACKET(OP) ASSY
⑤ REAR UNIT
⑥/⑦ LOWER CASE ASSY (Inc.ZOOMUNIT)
JACK BOARD ASSY
⑧ JUNCTION BOARD ASSY
⑧/⑩ ⑨ MAIN BOARD ASSY
⑩ /MECHANISM ASSY
⑪/⑫ ⑪ E.VF UNIT
⑫ SPEAKER
⑬/⑭ ⑬ MONITOR ASSY
⑭ MONITOR BOARD ASSY

Table 1-3-1

1.3.2 Disassembly method

STEP No.	PART	Fig.No.	POINT	NOTE
①	COVER(ZOOM) ASSY	Fig.1-3-1	(S①a),(S①b),2(L①a),2(L①b)	-
②	UPPER CASE ASSY (Inc.E.VF UNIT (B/W,COLOR), SPEAKER/ MONITOR)	Fig.1-3-2	(S②a),(S②b),(L②),(S②c) 2(S②a),(S②d),4(S②a) CAP(DC JACK) ☆CN(2a)	NOTE②
③	FRONT COVER ASSY (Inc.DC LIGHT,MIC)	Fig.1-3-3	COVER(JACK),3(S③),(L③a) (L③b),☆CN(3a)	NOTE③a NOTE③b
④	OP BLOCK ASSY /BRACKET(OP) ASSY	Fig.1-3-4	☆CN(4a),(4b) 2(S④),2(L④)	-
⑤	REAR UNIT	Fig.1-3-5	☆CN(5a) 4(S⑤)	NOTE⑤
⑥ /	LOWER CASE ASSY (Inc.ZOOMUNIT)	Fig.1-3-6	☆CN(6a),(6b),(6c) (S⑥a),2(S⑥b),2(S⑥c) (L⑥a),(L⑥b)	-
⑦	JACK BOARD ASSY		(S⑦)	NOTE⑦
⑧	JUNCTION BOARD ASSY	Fig.1-3-7	☆CN(8a),(8b),(8c) 2(S⑧),☆CN(8d)	NOTE⑧a NOTE⑧b
⑨ / ⑩	MAIN BOARD ASSY /MECHANISM ASSY	Fig.1-3-8	(S⑨a),(L⑨a),SHIELD PLATE ☆CN(9a),(9b),(9c) 2(S⑨b),(L⑨b),(L⑨c)	-
⑪ /	E.VF UNIT	Fig.1-3-9	☆CN (11a) ,(S⑪a),(S⑪b) (L⑪)	NOTE⑪a NOTE⑪b
⑫	SPEAKER		(S⑫),PLATE(SPK) ☆CN (12a)	-
⑬ /	MONITOR ASSY	Fig.1-3-10	2(S⑬a),COVER(HINGE) ☆CN (13a), 2(S⑬b)	NOTE⑬
⑭	MONITOR BOARD ASSY		3(S⑭),(L⑭)	NOTE⑭a NOTE⑭b NOTE⑭c NOTE⑭d

Table-1-3-2

Note: *Remove the parts marked in ▨ .*

CONN. No.	CONNECTOR					Pin No.
(2a)	MAIN	CN101	⇔	MONITOR	CN761	50
(3a)	MAIN	CN106	↔	MIC	—	3
(4a)	MAIN	CN107	⇔	CCD	—	20
(4b)	MAIN	CN108	⇔	OP BLOCK ASSY	—	24
(5a)	MAIN	CN104	↔	REAR UNIT	CN1	10
(6a)	MAIN	CN109	⇔	ZOOM UNIT	—	15
(6b)	MAIN	CN102	↔	JACK	CN501	9
(6c)	JACK	CN502	⇔	MAIN	CN103	14
(8a)	JUNCTION	CN571	⇔	MAIN	CN113	34
(8b)	JUNCTION	CN574	⇔	LOADING MOTOR	—	6
(8c)	JUNCTION	CN573	⇔	DRUM MOTOR	—	11
(8d)	JUNCTION	CN572	⇔	SENSOR	—	15
(9a)	MAIN	CN110	⇔	HEAD	—	8
(9b)	MAIN	CN112	⇔	CAPSTAN MOTOR	—	18
(9c)	MAIN	CN111	⇔	ROTARY ENCODER	—	6
(11a)	MONITOR	CN763	⇔	E.VF UNIT (C_B/W)	CN721/CN751	20
(12a)	MONITOR	CN765	↔	SPEAKER	—	2
(13a)	MONITOR	CN764	⇔	LCD BL	CN751	33/32

Table-1-3-3

NOTE ②: *Remove the CAP (DC JACK) before removing these parts .*

NOTE ③a: *As it is difficult to remove (L③b), remove the F. COVER ASSY by lowering it.*

NOTE ③b: *Be careful not to damage any parts.*

Particularly, take care not to scratch or stain the lenses.

NOTE ⑤: *As screw No. 19 is hidden behind the cassette cover, open the cassette cover to enable removal of the screw.*

NOTE ⑦: *As screw No. 27 is hidden behind the cassette cover, open it before removing the screw.*

NOTE ⑧a: *As the CN572 is located at the back of the assembly, unplug the three connectors and remove the screws before disconnecting the CN572.*

NOTE ⑧b: *Be careful not to damage any of the switches.*

NOTE ⑪a: *To remove the unit, unlock the connector and pull out the unit together with the FPC.*

NOTE ⑪b: *When removing the unit, insert the FPC into the gap.*

NOTE ⑬: *When reassembling the MONITOR ASSY, be careful not to damage any of the parts.*

NOTE ⑭a: *To remove the assembly, pull the memory card out in advance. (MMC compatible models only)*

NOTE ⑭b: *Be careful not to damage any of the parts.*

NOTE ⑭c: *Be careful not to damage any of the parts.*
SW KNOB(DC LIGHT: Gray)

NOTE ⑭d: *Be careful not to damage any of the parts.*
SW KNOB(VIDEO-DSC: Violet)

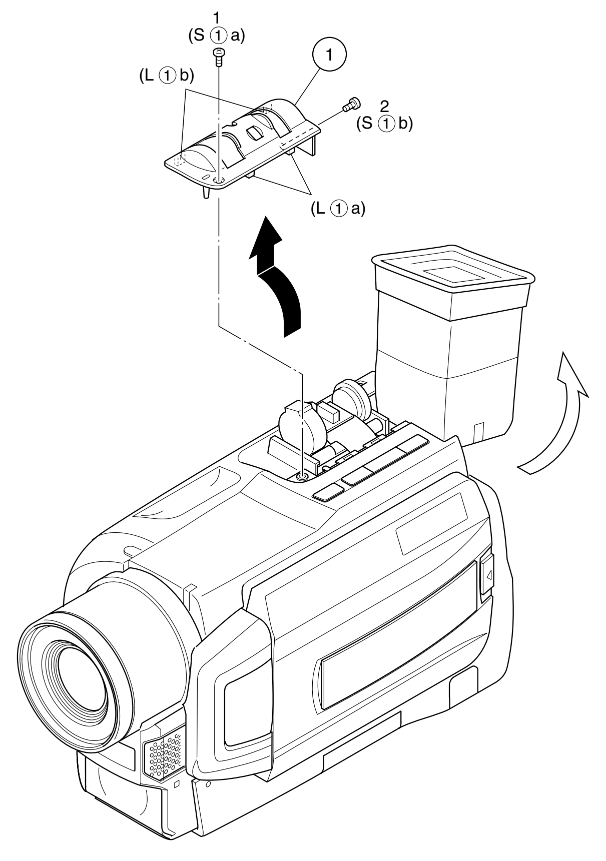


Fig. 1-3-1

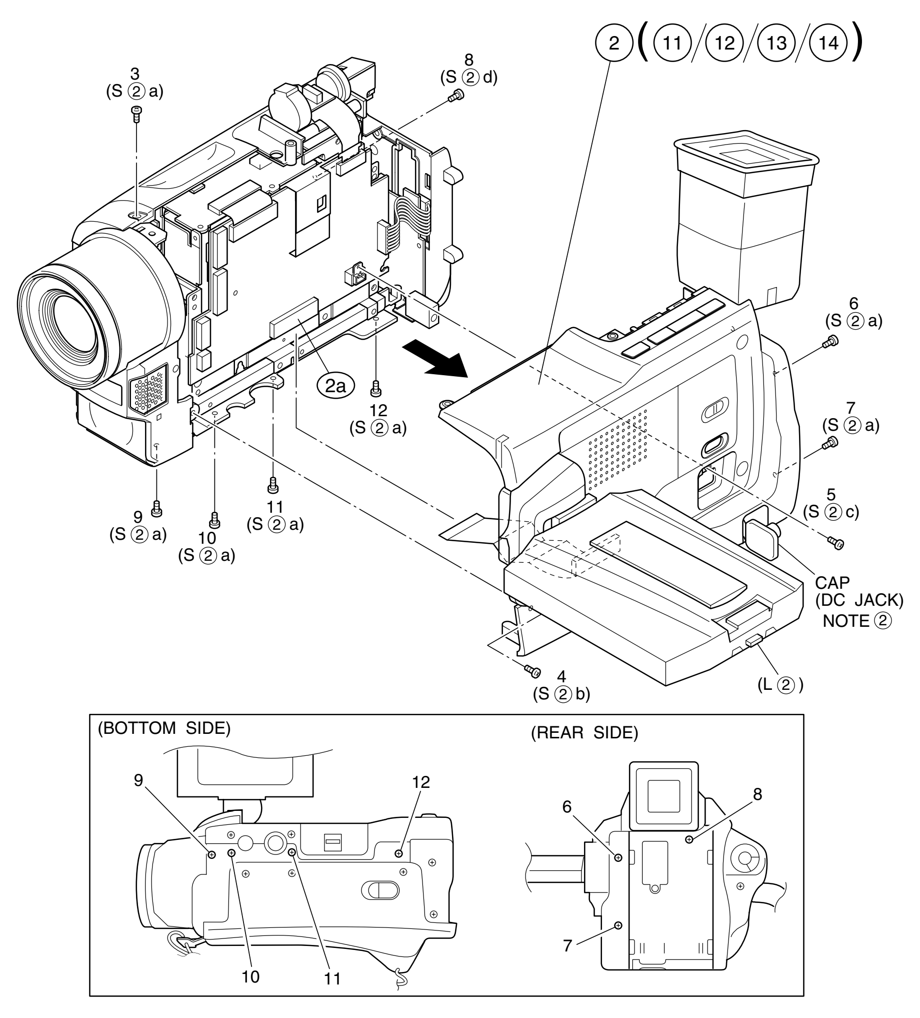

② (⑪/⑫/⑬/⑭)
3 (S ② a)
8 (S ② d)
6 (S ② a)
2a
12 (S ② a)
7 (S ② a)
5 (S ② c)
9 (S ② a)
10 (S ② a)
11 (S ② a)
CAP (DC JACK) NOTE ②
4 (S ② b)
(L ②)
(BOTTOM SIDE)
(REAR SIDE)
9
12
10
11
6
8
7

Fig. 1-3-2

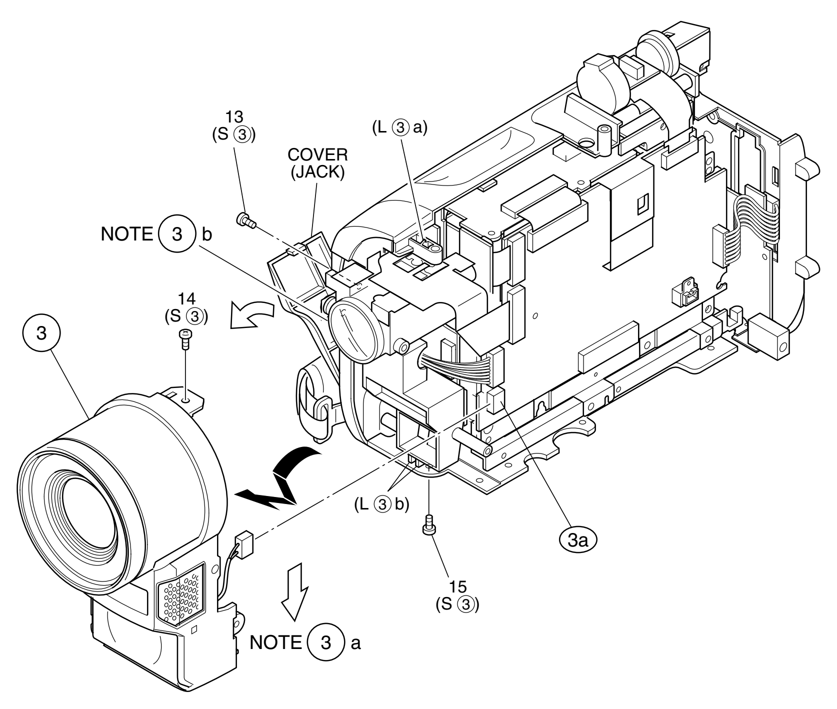

13 (S ③)
(L ③ a)
COVER (JACK)
NOTE ③ b
14 (S ③)
③
(L ③ b)
3a
15 (S ③)
NOTE ③ a

Fig. 1-3-3

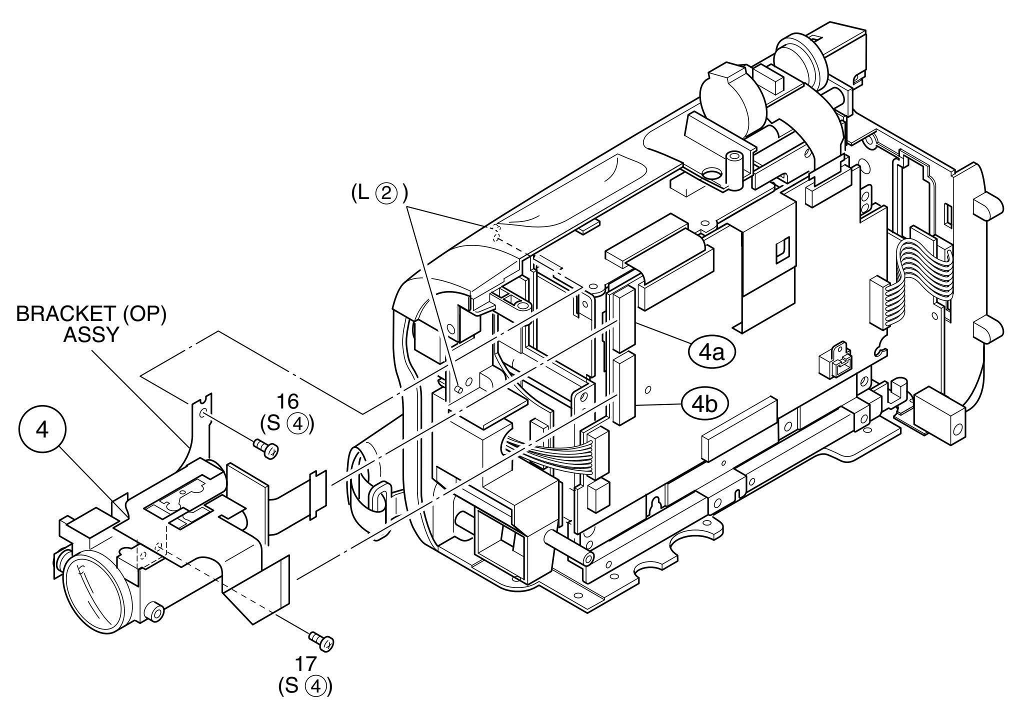

(L ②)
BRACKET (OP) ASSY
4
16
(S ④)
4a
4b
17
(S ④)

Fig. 1-3-4

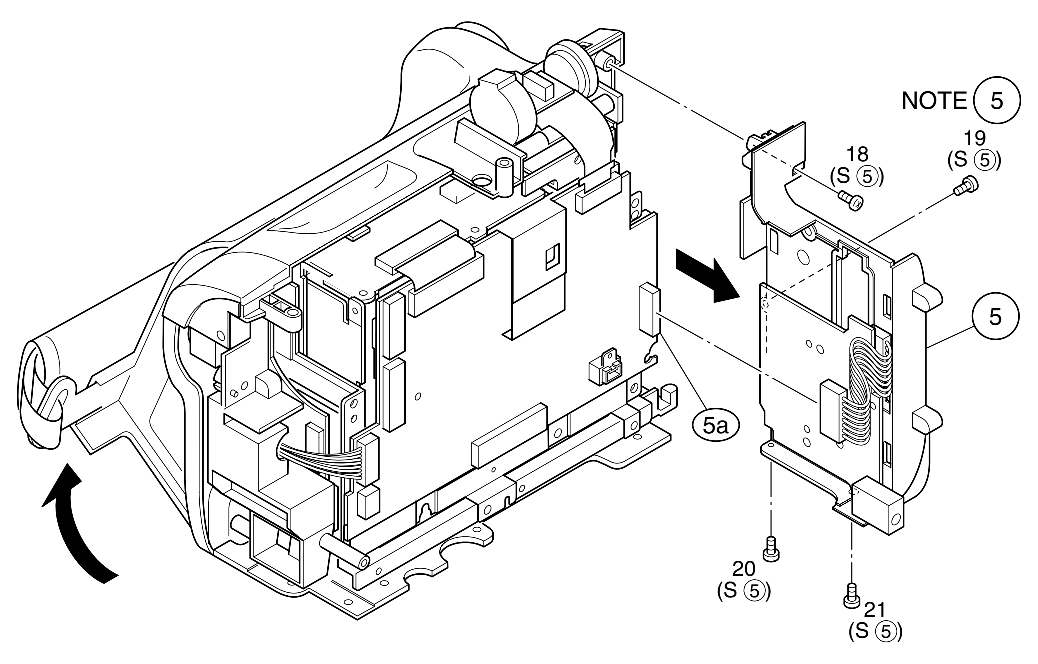

NOTE ⑤
18
(S ⑤)
19
(S ⑤)
5
5a
20
(S ⑤)
21
(S ⑤)

Fig. 1-3-5

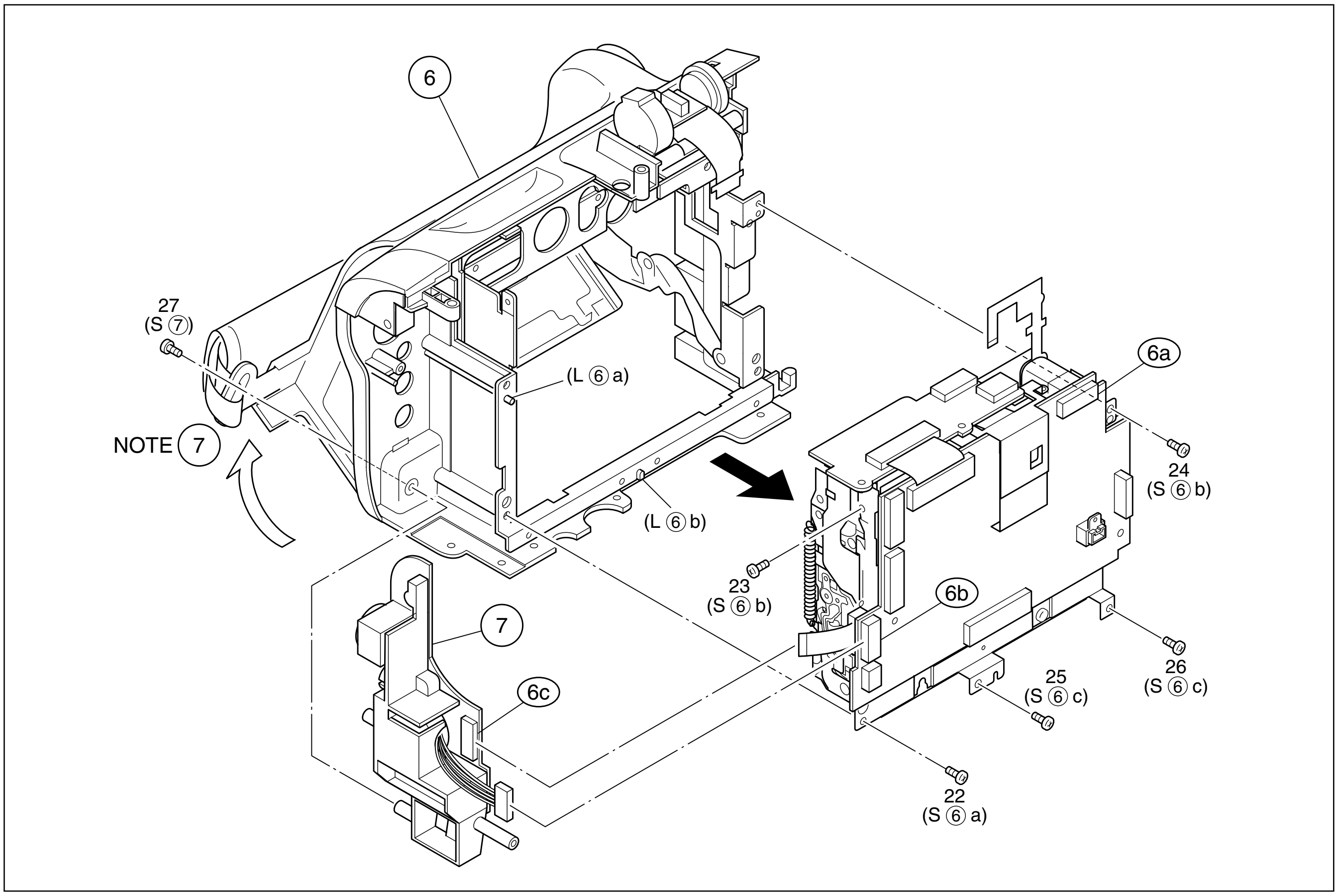

6
27
(S ⑦)
(L ⑥ a)
NOTE ⑦
(L ⑥ b)
6a
24
(S ⑥ b)
23
(S ⑥ b)
6b
7
6c
25
(S ⑥ c)
26
(S ⑥ c)
22
(S ⑥ a)

Fig. 1-3-6

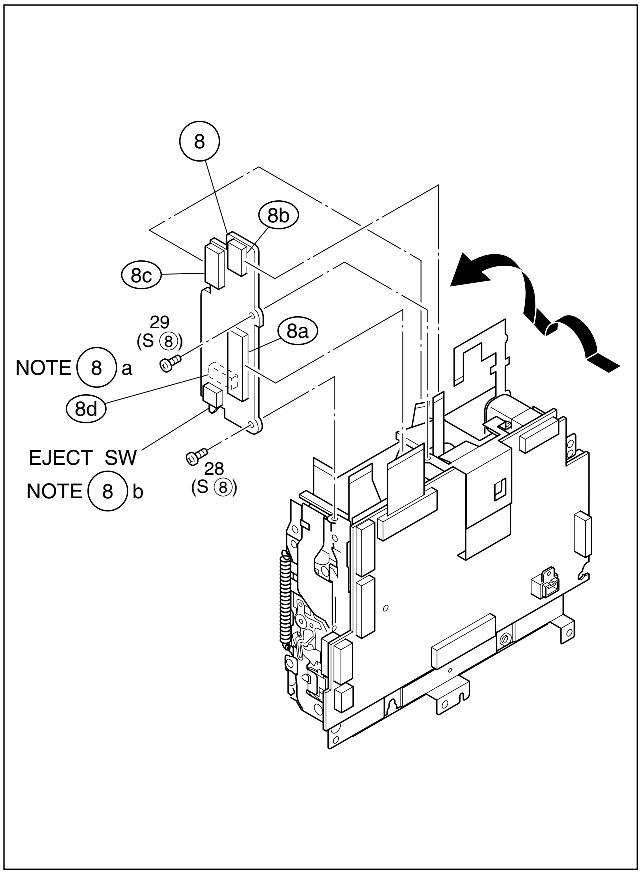

8
8b
8c
29
(S ⑧)
8a
NOTE ⑧ a
8d
EJECT SW
28
(S ⑧)
NOTE ⑧ b

Fig. 1-3-7

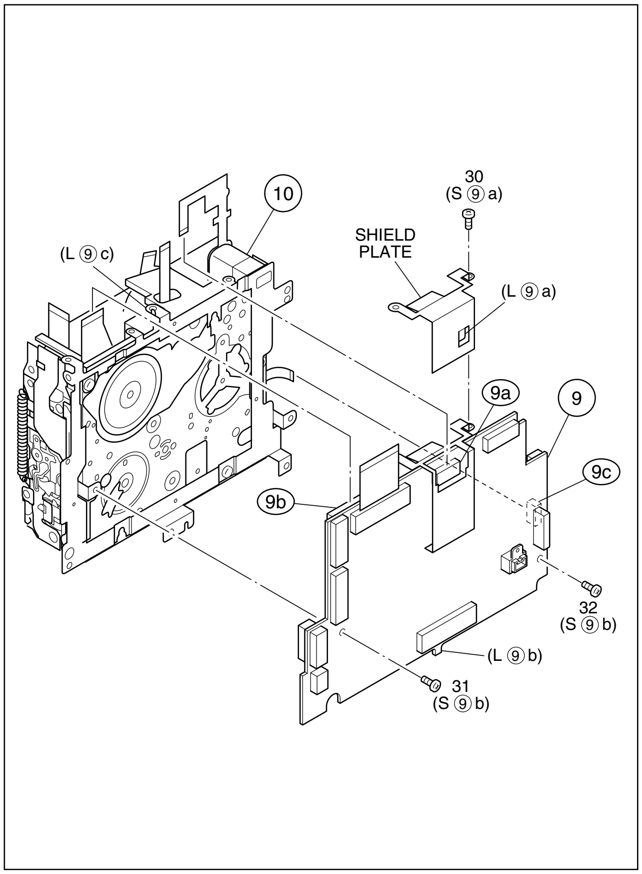

10
30
(S ⑨ a)
SHIELD
PLATE
(L ⑨ c)
(L ⑨ a)
9a
9
9c
9b
32
(S ⑨ b)
(L ⑨ b)
31
(S ⑨ b)

Fig. 1-3-8

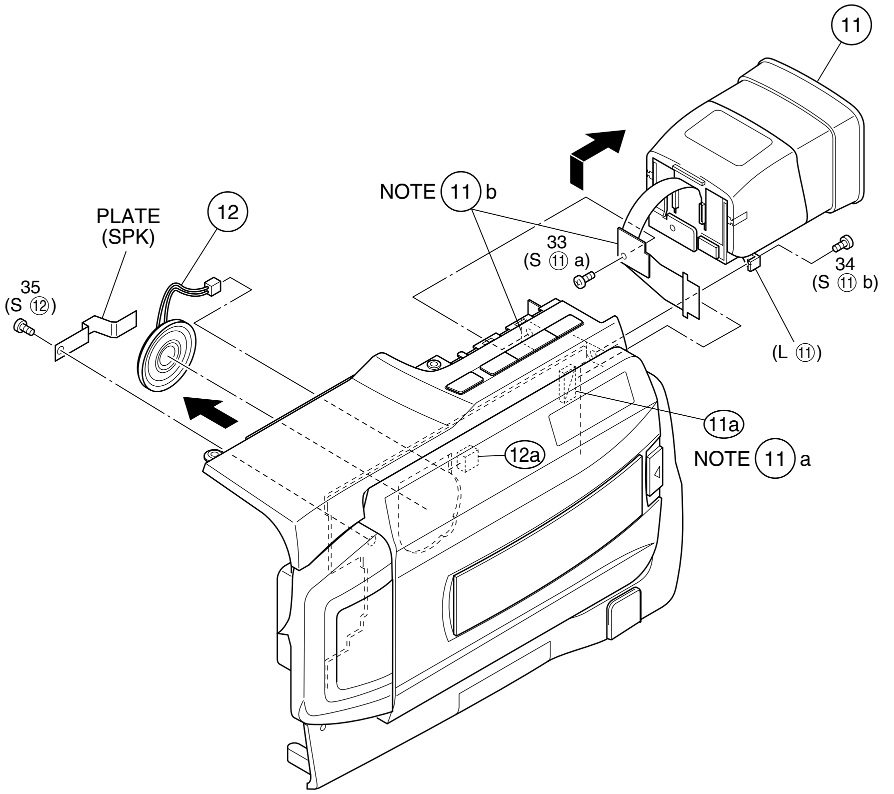
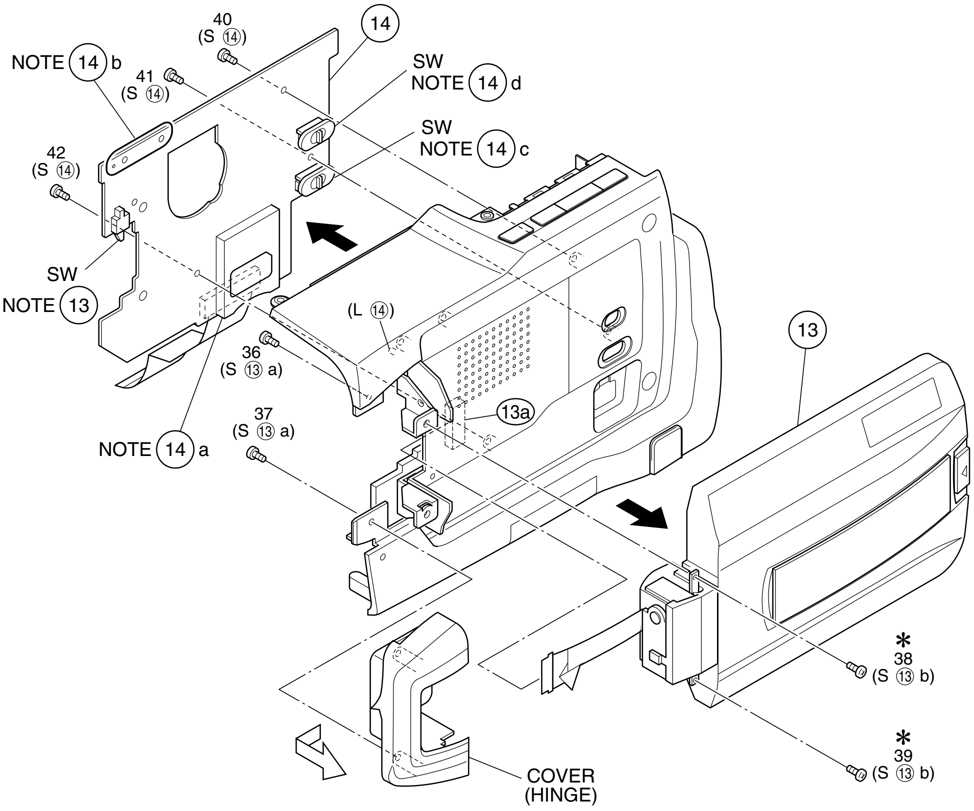

⑪
NOTE ⑪ b
PLATE (SPK)
⑫
33 (S ⑪ a)
34 (S ⑪ b)
35 (S ⑫)
(L ⑪)
⑪a
⑫a
NOTE ⑪ a

Fig. 1-3-9


40 (S ⑭)
⑭
NOTE ⑭ b
41 (S ⑭)
SW NOTE ⑭ d
SW NOTE ⑭ c
42 (S ⑭)
SW NOTE ⑬
(L ⑭)
⑬
36 (S ⑬ a)
⑬a
37 (S ⑬ a)
NOTE ⑭ a
∗ 38 (S ⑬ b)
∗ 39 (S ⑬ b)
COVER (HINGE)

∗: 0.147N·m (1.5kgf·cm)

Fig. 1-3-10

1.4 ⑬ MONITOR ASSEMBLY

Note: *The shape of the monitor assembly varies by the size of the LCD screen.*

For the 2.5"-type LCD, refer to Fig. 1-4-1.

1.4.1 Disassembly/assembly of monitor assembly (for 2.5"-type LCD)

Note: *Be careful not to soil or scratch the monitor screen through the disassembly/assembly work.*

1. Remove the four screws 1 to 4 in numerical order. While disengaging the six hooks (L⑬a to L⑬f) in alphabetical order, remove the monitor cover assembly.
2. Unlock the connector a and then disconnect the FPC while lifting the hinge assembly upwards to remove it together with the FPC.

Note⑬a: *For disconnecting the FPC, unlock the connector first and then lift the hinge assembly upwards. Accordingly, the FPC is disconnected together with the hinge assembly.*

Note⑬b: *Treat the wires carefully.*

3. Unplug the wires and FPCs from the two connectors ⓑ, ⓒ, and then remove the MONITOR BL board assembly, holder (PWB) and backlight in that order.
4. Remove the LCD module.

1.4.2 Disassembly/assembly of hinge assembly (for 2.5"-type LCD)

1. Remove the three screws (5 to 7), and then remove the hinge covers (1) and (2) by disengaging a total of four hooks (L⑬g, L⑬h) at the two sides.
2. Separate the SW board assembly and the FPC from the hinge assembly.

Note⑬c: *When connecting the FPC, arrange the FPC wire by winding it around the shaft (hinge pin) of the hinge assembly by two and a half turns while paying heed to the orientation of the hinge assembly and FPC.*

Note⑬d: *When disassembling/assembling the hinge assembly, pay careful attention to every part not to damage anything.*

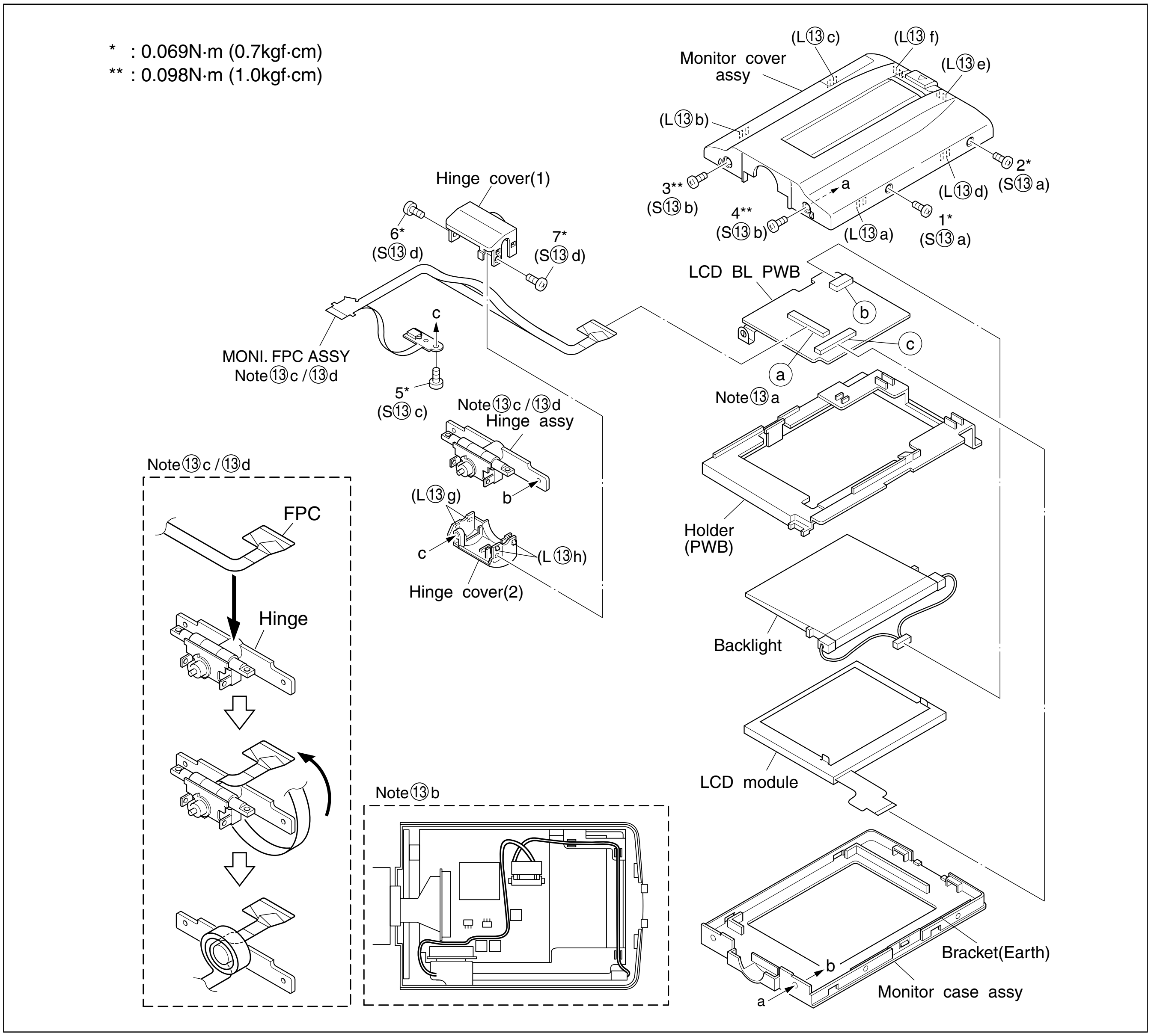

* : 0.069N·m (0.7kgf·cm)
** : 0.098N·m (1.0kgf·cm)
(L⑬c)
(L⑬f)
Monitor cover assy
(L⑬e)
(L⑬b)
2*
(S⑬a)
3**
(S⑬b)
a
(L⑬d)
4**
(S⑬b)
(L⑬a)
1*
(S⑬a)
Hinge cover(1)
6*
(S⑬d)
7*
(S⑬d)
LCD BL PWB
b
c
c
MONI. FPC ASSY
Note⑬c / ⑬d
a
5*
(S⑬c)
Note⑬c / ⑬d
Hinge assy
Note⑬a
Note⑬c / ⑬d
FPC
(L⑬g)
b
c
(L⑬h)
Hinge cover(2)
Holder
(PWB)
Hinge
Backlight
LCD module
Note⑬b
Bracket(Earth)
b
a
Monitor case assy

Fig. 1-4-1

Note: *The shape of the monitor assembly varies depending on the size of the LCD screen.*

For the 3"/3.5"-type LCD, refer to Fig. 1-4-2.

1.4.3 Disassembly/assembly of monitor assembly (for 3"/3.5"-type LCD)

Note: *Be careful not to soil or scratch the monitor screen through the disassembly/assembly work.*

1. Remove the four screws 1 to 4 in numerical order. While disengaging the six hooks (L⑬a to L⑬f) in alphabetical order, open the monitor cover assembly and remove it after disconnecting the FPC from the connector a..

Note⑬e: *When removing the monitor cover assembly, be careful not to damage the FPC and connector.*

2. Unlock the connector b and then disconnect the FPC while lifting the hinge assembly upwards to remove it together with the FPC.

Note⑬f: *For disconnecting the FPC, unlock the connector first and then lift the hinge assembly upwards. Accordingly, the FPC is disconnected together with the hinge assembly.*

Note⑬g: *Treat the wires carefully.*

3. Unplug the wires and FPCs from the two connectors ⓑ, ⓒ, and then remove the MONITOR BL board assembly, holder (PWB) and backlight in that order.
4. Remove the LCD module while disengaging it from the four hooks (L⑬g, L⑬h, L⑬j, L⑬k,).

Note⑬h: *The holder (LCD) is used for the 3"-type monitor assembly only.*

1.4.4 Disassembly/assembly of hinge assembly (for 3"/3.5"-type LCD)

1. Remove the three screws (5 to 7), and then remove the hinge covers (1) and (2) by disengaging a total of four hooks (L⑬m, L⑬n) at the two sides.
2. Separate the SW board assembly and the FPC from the hinge assembly.

Note⑬j: *When disassembling/assembling the hinge assembly, pay careful attention to every part not to damage anything.*

Note⑬k: *When connecting the FPC, arrange the FPC wire by winding it around the shaft (hinge pin) of the hinge assembly by two and a half turns while paying heed to the orientation of the hinge assembly and FPC.*

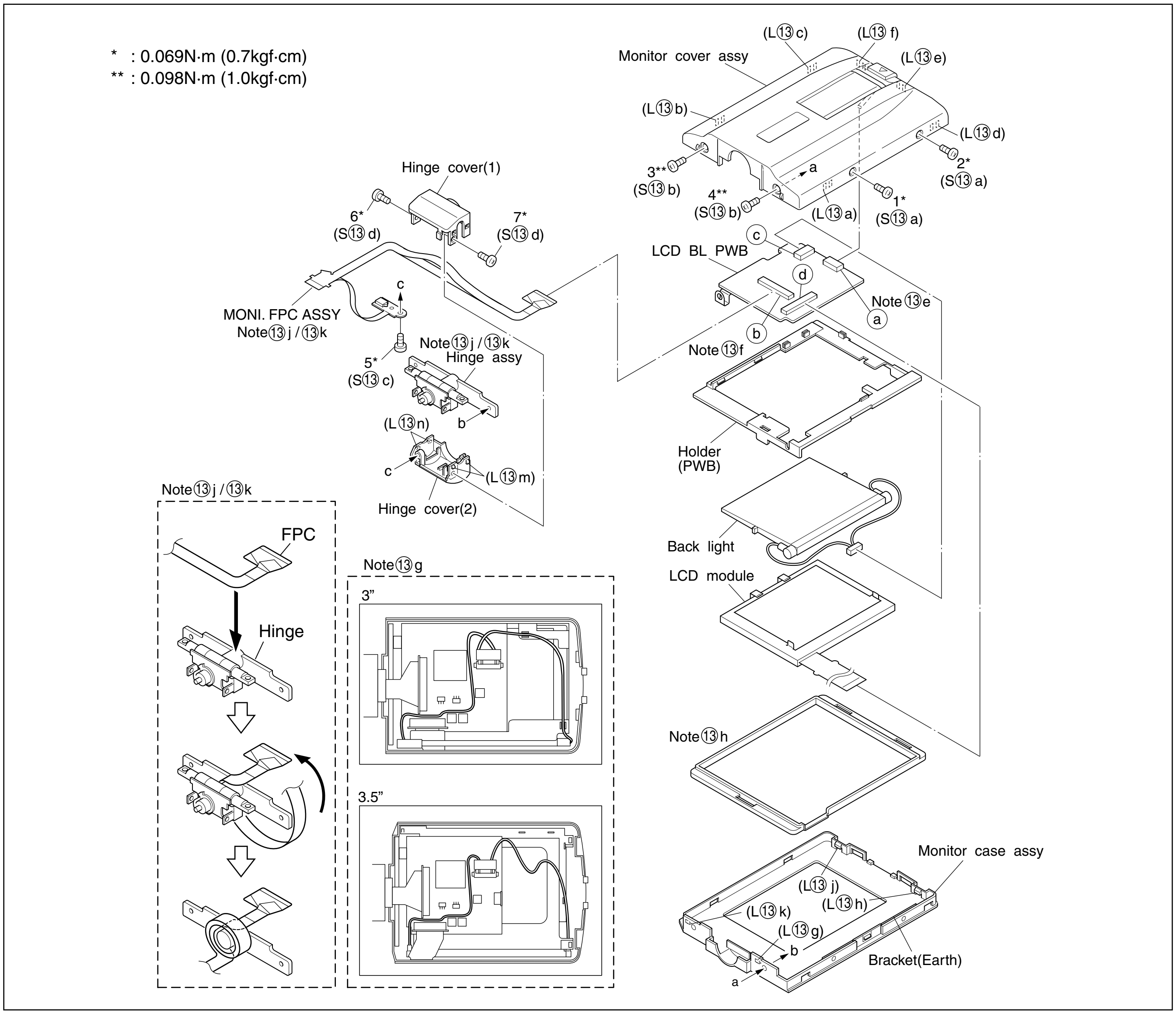

* : 0.069N·m (0.7kgf·cm)
** : 0.098N·m (1.0kgf·cm)
Monitor cover assy
(L⑬c)
(L⑬f)
(L⑬e)
(L⑬b)
(L⑬d)
3**
(S⑬b)
4**
(S⑬b)
a
(L⑬a)
1*
(S⑬a)
2*
(S⑬a)
Hinge cover(1)
6*
(S⑬d)
7*
(S⑬d)
c
LCD BL PWB
d
Note⑬e
a
b
Note⑬f
MONI. FPC ASSY
Note⑬j / ⑬k
c
5*
(S⑬c)
Note⑬j / ⑬k
Hinge assy
(L⑬n)
b
c
(L⑬m)
Hinge cover(2)
Holder
(PWB)
Back light
LCD module
Note⑬h
Monitor case assy
(L⑬j)
(L⑬h)
(L⑬k)
(L⑬g)
b
a
Bracket(Earth)
Note⑬j / ⑬k
FPC
Hinge
Note⑬g
3"
3.5"

Fig. 1-4-2

1.5 ⑪ E. VF ASSEMBLY

Note: *The shape of the E. VF assembly varies by the type of the viewfinder (B/W, color VF).*
(For the B/W VF, refer to Fig. 1-5-1.
For the COLOR VF, refer to Fig. 1-5-2.)

1.5.1 Disassembly/assembly of E. VF assembly (for B/W VF)

1. Remove the two screws (1, 2) and the eyepiece assembly while disengaging the hook (L⑪a).
2. Remove the two screws (3, 4). And spread one side of the top case sub-assembly to disengage the hooks (L⑪b, L⑪c) that are located at both sides of the top case sub-assembly, then remove the top case sub-assembly.

Note⑪a: *When removing the top case sub-assembly, peel off or unplug the FPC that is bonded to the sub-assembly.*
Note⑪b: *When reassembling the top case sub-assembly, be careful not to catch the FPC between any of the parts.*

3. Remove the screw (5) and then remove the LCD assembly.

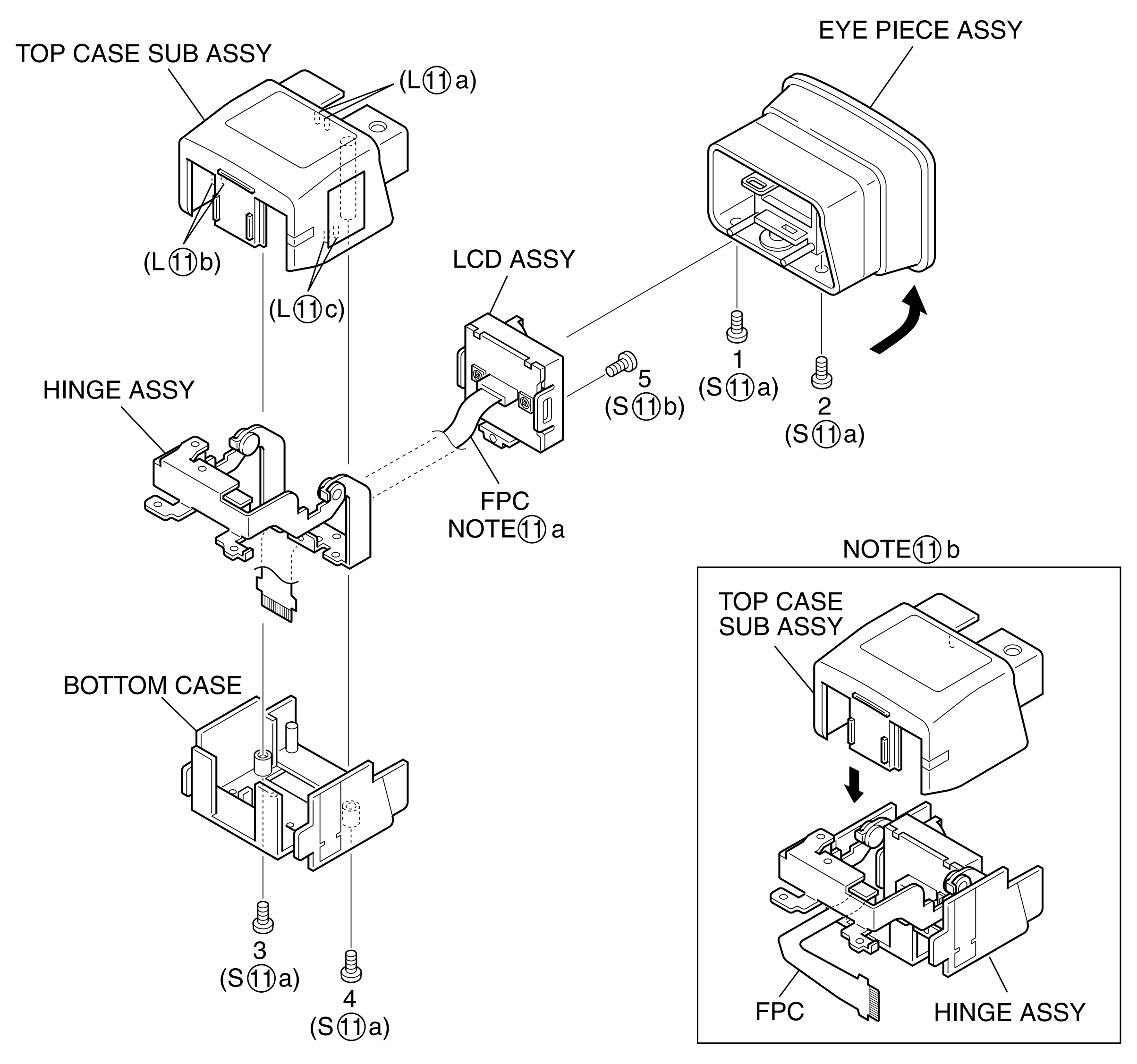

TOP CASE SUB ASSY
(L⑪a)
EYE PIECE ASSY
(L⑪b)
(L⑪c)
LCD ASSY
HINGE ASSY
5
(S⑪b)
1
(S⑪a)
2
(S⑪a)
FPC
NOTE⑪a
NOTE⑪b
TOP CASE
SUB ASSY
BOTTOM CASE
3
(S⑪a)
4
(S⑪a)
FPC
HINGE ASSY

Fig. 1-5-1

1.5.2 Disassembly/assembly of E. VF assembly (for Color VF)

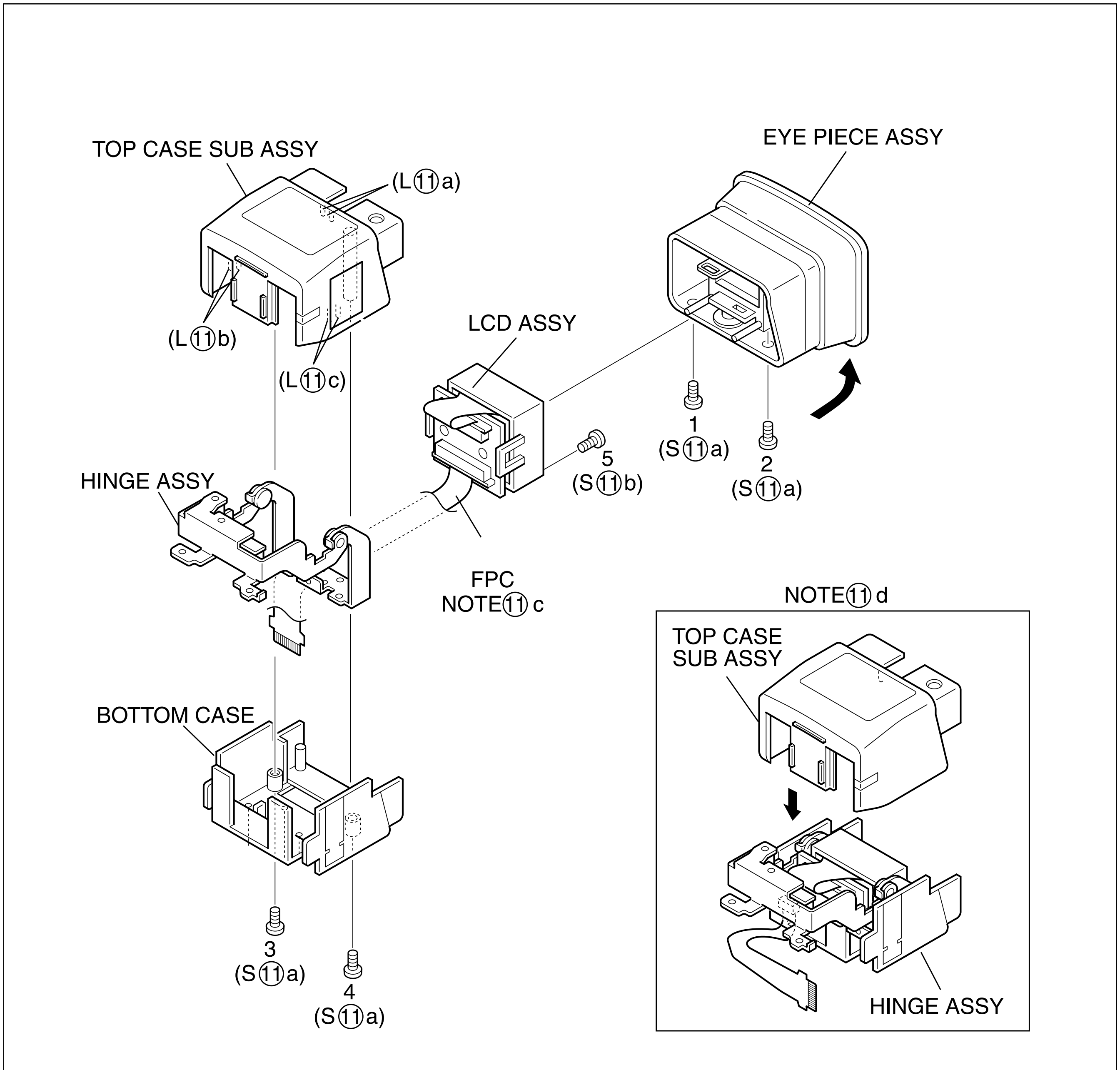
Note: *Place the E. VF assembly with the VF case (upper) assembly down through the disassembly/assembly work.*

1. Remove the two screws (1, 2) and the eyepiece assembly while disengaging the hook (L⑪a).
2. Remove the two screws (3, 4). And spread one side of the top case sub-assembly to disengage the hooks (L⑪b, L⑪c) that are located at both sides of the top case sub-assembly, then remove the top case sub-assembly.

Note⑪c: *When removing the top case sub-assembly, peel off or unplug the FPC that is bonded to the sub-assembly.*

Note⑪d: *When reassembling the top case sub-assembly, be careful not to catch the FPC between any of the parts.*

3. Remove the screw (5) and then remove the LCD assembly.



TOP CASE SUB ASSY
(L⑪a)
EYE PIECE ASSY
(L⑪b)
(L⑪c)
LCD ASSY
1
(S⑪a)
2
(S⑪a)
5
(S⑪b)
HINGE ASSY
FPC
NOTE⑪ c
NOTE⑪ d
TOP CASE
SUB ASSY
BOTTOM CASE
3
(S⑪a)
4
(S⑪a)
HINGE ASSY

Fig. 1-5-2

1.6 DISASSEMBLY/ASSEMBLY OF OP BLOCK ASSEMBLY/CCD BOARD ASSEMBLY

1.6.1 Precautions

1. Take care in handling the CCD image sensor, optical LPF and lens components when performing maintenance etc., especially with regard to surface contamination, attached dust or scratching. If fingerprints are present on the surface they should be wiped away using either a silicon paper, clean chamois or the cleaning cloth.
2. The CCD image sensor may have been shipped with a protective sheet attached to the transmitting glass. When replacing the CCD image sensor, do not peel off this sheet from the new part until immediately before it is mounted in the OP Block Assembly.
3. The orientation of the optical LPF is an important factor for installation. If there is some marking on the LPF, be sure to note it down before removing and to reassemble it very carefully as it was referring to the marking.

1.6.2 How to remove CCD board assembly and CCD base assembly

1. Unsolder the CCD board assembly by the 14 points (SD1) and then remove it.
2. Remove the two screws (1, 2) and remove the CCD base assembly.

Note④a: *When removing the CCD base assembly, pay heed to the CCD image sensor because the spacer rubber and optical LPF are occasionally removed together with the CCD image sensor.*

Note ④b: *When replacing the CCD image sensor, don't replace it individually but replace the CCD base assembly in whole with a new one.*

1.6.3 How to assemble CCD base assembly and CCD board assembly

1. Install the optical LPF with the spacer rubber attached to its CCD side in the OP block assembly.

Note④c: *Pay careful attention to the orientation of the LPF.*

2. Set the CCD base assembly with careful attention to the spacer rubber not to come off the right position, and fasten them together with the two screws (1, 2).
3. Set the CCD board assembly in the CCD base assembly, and then solder it by the 14 points (SD1).

1.6.4 Replacement of Service Repair Parts

The service repair parts for the OP Block Assembly are as listed below.

Before replacement of these parts, remove the bracket (OP assembly) as required.

Take special care not to disconnect any of the FPC wires or cause any damage due to soldering (excessive heating).

1. Focusing motor
2. Zoom motor
3. Iris motor unit

Note④d: *When replacing the focusing motor or the zoom motor, solder the FPC at a space of about 1 mm above the terminal pin.*

Note④e: *The iris motor unit includes the FPC Assembly and two sensors.*

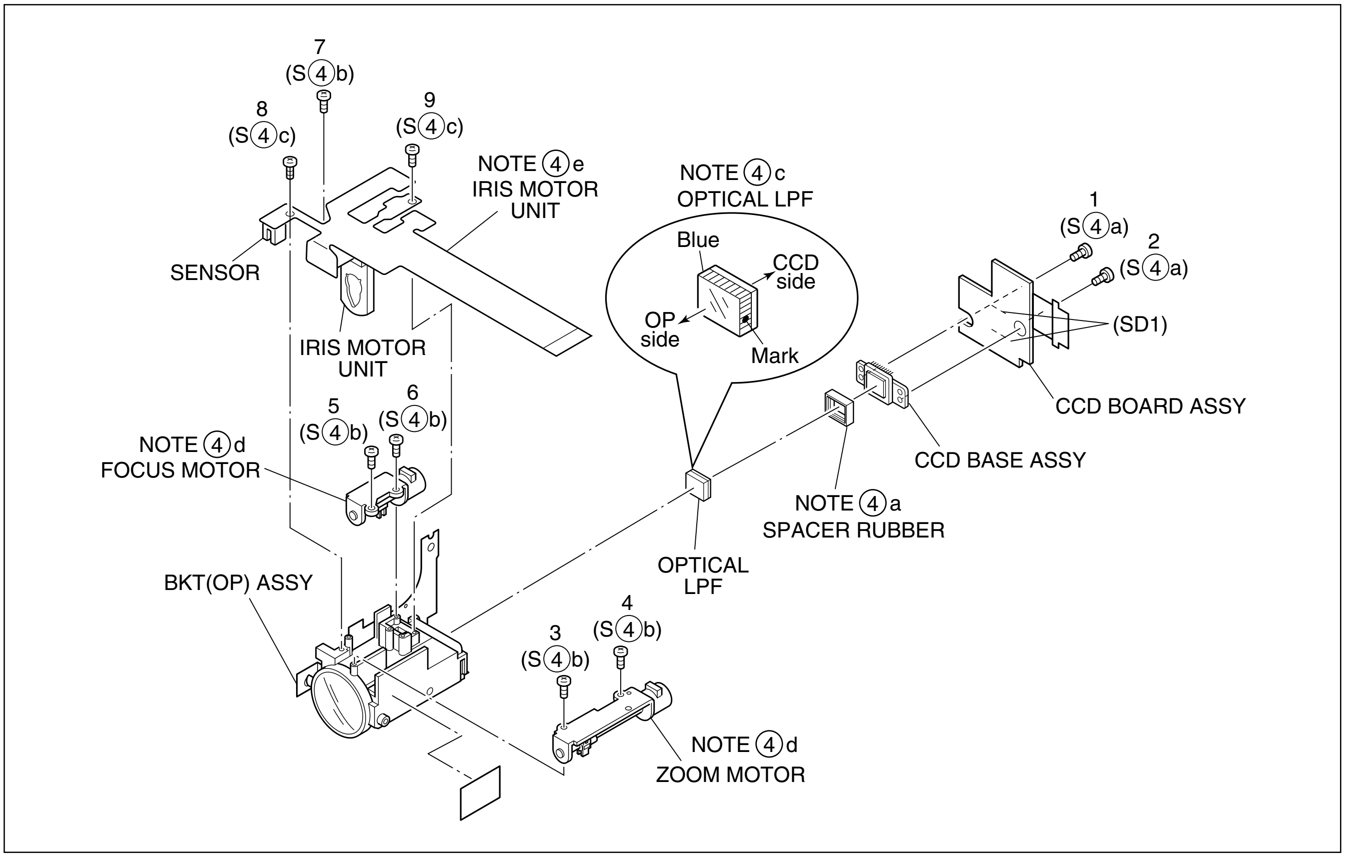


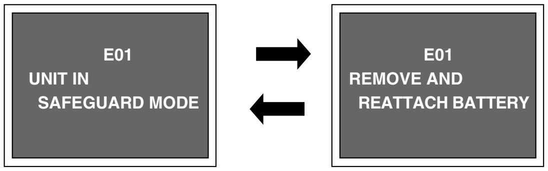
Fig. 1-6-1

1.7 EMERGENCY DISPLAY

Whenever some abnormal signal is input to the syscon CPU, an error number (E01, as an example) is displayed on the LCD monitor or (in the electronic view finder).
In every error status, such the message as shown below alternately appear over and over.

- In an emergency mode, all operations except turning on/off the POWER switch are ineffectual.

Example (in case of the error number E01):



E01
UNIT IN
SAFEGUARD MODE

E01
REMOVE AND
REATTACH BATTERY

LCD display	Emergency mode	Details	Possible cause
E01	LOADING	In the case the encoder position is not shifted to the next point though the loading motor has rotated in the loading direction for 4 seconds or more. This error is defined as [E01].	1. The mechanism is locked during mode shift. 2. The mechanism is locked at the mechanism loading end, because the encoder position is skipped during mechanism mode shift. 3. No power is supplied to the loading MDA.
E02	UNLOADING	In the case the encoder position is not shifted to the next point though the loading motor has rotated in the unloading direction for 4 seconds or more. This error is defined as [E02].	1. The mechanism is locked during mode shift. 2. The mechanism is locked at the mechanism loading end, because the encoder position is skipped during mechanism mode shift.
E03	TU & SUP REEL FG	In the case no REEL FG is produced for 4 seconds or more in the capstan rotation mode after loading was complete, the mechanism mode is shifted to STOP with the pinch roller set off. This error is defined as [E03]. However, no REEL EMG is detected in the SLOW/STILL mode.	1. The idler gear does not engage with the reel disk well. 2. Though the idler gear and reel disk are engaged with each other, the tape is not wound because of overload to the mechanism. 3. No FG pulse is output from the reel sensor. 4. No power is supplied to the reel sensor. 5. Tape transport operation takes place with a cassette having no tape inside. 6. The tape slackens and no pulse is produced until the slack is taken up and the tape comes into the normal status.
E04	DRUM FG	In the case there is no DRUM FG input in the drum rotation mode for 4 seconds or more. This error is defined as [E04], and the mechanism mode is shifted to STOP with the pinch roller set off.	1. The drum cannot be started or drum rotation is stopped because tape transport load is too high. 1) Tape tension is extremely high. 2) The tape is damaged or soiled with grease, etc. 2. The DRUM FG signal is not received by the syscon CPU. 1) Disconnection in the middle of the signal line. 2) Failure of the DRUM FG pulse generator (hall element). 3. No drum control voltage is supplied to the MDA. 4. No power is supplied to the DRUM MDA.
E05	–	–	–
E06	CAPSTAN FG	In the case no CAPSTAN FG is produced in the capstan rotation mode for 2 seconds or more. This error is defined as [E06], and the mechanism mode is shifted to STOP with the pinch roller set off. However, no CAPSTAN EMG is detected in the STILL/FF/REW mode.	1. The CAPSTAN FG signal is not received by the syscon CPU. 1) Disconnection in the middle of the signal line. 2) Failure of the CAPSTAN FG pulse generator (MR element). 2. No capstan control voltage is supplied to the MDA. 3. No power is supplied to the CAPSTAN MDA. 4. The capstan cannot be started or capstan rotation is stopped because tape transport load is too high. 1) Tape tension is extremely high. (Mechanical locking) 2) The tape is damaged or soiled with grease, etc. (Tape tangling occurs, etc.)

(DVC_03)

Table 1-7-1

1.8 SERVICE NOTE

Symbol No. →	①		② (⑪ / ⑫ / ⑬ / ⑭)										③			④		⑤			
Removing order of screw →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Place to stick screw →					✻																
Reference drawing →	Fig. 1-3-1		Fig. 1-3-2										Fig. 1-3-3			Fig. 1-3-4		Fig. 1-3-5			
Screw tightening torque →	I																				

Symbol No. →	⑥					⑦	⑧		⑨ / ⑩			⑪		⑫	⑬				⑭		
Removing order of screw →	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Place to stick screw →		✻	✻	✻	✻									✻			✻	✻			
Reference drawing →	Fig. 1-3-6						Fig. 1-3-7		Fig. 1-3-8			Fig. 1-3-9			Fig. 1-3-10						
Screw tightening torque →	I																II		I		

	MONITOR ASSY						
Removing order of screw →	1	2	3	4	5	6	7
Place to stick screw →							
Reference drawing →	Fig. 1-4-1, 2						
Screw tightening torque →	Ⅲ		Ⅳ		Ⅲ		

	VF UNIT(B/W,COLOR)					
Removing order of screw →	1	2	3	4	5	
Place to stick screw →						
Reference drawing →	Fig. 1-5-1, 2					
Screw tightening torque →	Ⅲ					

	OP BLOCK ASSY								
Removing order of screw →	1	2	3	4	5	6	7	8	9
Place to stick screw →									
Reference drawing →	Fig. 1-6-1								
Screw tightening torque →	V								

< NOTE >

1) ✻ : Dont't reuse the screw, because screw lock bond was applied to them.

2) Pay careful attention to tightening torque for each screw.

I : 0.088N·m (0.9kgf·cm)
II : 0.147N·m (1.5kgf·cm)
Ⅲ : 0.069N·m (0.7kgf·cm)
Ⅳ : 0.098N·m (1.0kgf·cm)
V : 0.118N·m (1.2kgf·cm)

Table 1-8-1

SECTION 2
MECHANISM ADJUSTMENT

2.1 PRELIMINARY REMARKS ON ADJUSTMENT AND REPAIR

2.1.1 Precautions

1. When fastening parts, pay careful attention to the tightening torque of each screw. Unless otherwise specified, tighten a screw with the torque of 0.039 N•m (0.4 kgf•cm).
2. Be sure to disconnect the set from the power supply before fastening and soldering parts.
3. When disconnecting/connecting wires, be careful not to get them and their connectors damaged. (Refer to the Section 1.)
4. When replacing parts, be very careful neither to damage other parts nor to fit wrong parts by mistake.

2.1.2 Notes on procedure for disassemby/assembly

The disassembling procedure table (Table 2-4-1 on page 2-6,a part of the table is shown below for reference)shows the procedure to disassemble/reassemble mechanism parts.
Carefully read the following explanation before starting actual disassembling/reassembling work. The item numbers (circled numbers)in the following explanation correspond to those appearing under respective columns of the table.

(1) Circled numbers appearing in this column indicate the order to remove parts. When reassembling, follow these numbers in the reverse order. Circled numbers in this column correspond to those appearing in drawings of this section.

(2) This column shows part names corresponding to circled numbers in the left column.

(3) The symbol (T or B)appearing in this column shows the side which the objective part is mounted on.
T =the upper side, B =the lower side

(4) Symbols appearing in this column indicate drawing numbers.
Step Part Name Fig. Point Note Remarks

(5) This column indicates parts and points such as screws, washers,springs,and others to be removed/fitted for disassembling/reassembling the mechanism. Besides such the parts, this column occasionally indicates working points.

P = Spring
W = Washer
S = Screw
* = Lock (L),soldering (SD),shield,connector (CN), etc.

Example
- Remove ((W1)=Washer W1.
- **Remove the solder at (SD1)=Point SD1.
- **Disconnect Ⓐ =Connector Ⓐ .

(6) Numbers in this column represent the numbers of notes in the text.For example, “1” means “Note 1”.
(For parts that need phase adjustment after reassembling, refer to “2.6 MECHANISM ADJUSTMENTS”.)

(7) This column indicates required after-disassembling/-reassembling work such as phase adjustment or mechanism adjustment.

NO.	PART NAME		FIG.	POINT	NOTE	REMARKS
Ⓐ	Cassette housing assembly	T	Fig. 2-4-5	3(S1),(L1a)-(L1d)	1a, 1b, 1c, 1d	Adjustment
(2a)	Reel disk (SUP) assembly	T	Fig. 2-4-6	(W2)	2a, 2b	
(2b)	Reel disk (TU) assembly	T	Fig. 2-4-6	(W2)	2a, 2b	
(2c)	Reel cover assembly	T	Fig. 2-4-6	(S2b),2(S2a),(W2)	2d	
(3a)	Tension arm assembly	T	Fig. 2-4-7	(W3a)	3b	
(3b)	Release guide assembly	T	Fig. 2-4-7	-	3a	
(3c)	Idler arm assembly	T	Fig. 2-4-7	(W3b)	-	
(3d)	Guide arm assembly	T	Fig. 2-4-7	-	3a	
(3e)	Pinch roller arm assembly	T	Fig. 2-4-7	(W3a)	-	
(4a)	Cleaner arm assembly	T	Fig. 2-4-8	(L4a)	4a	
(4b)	Slant pole arm assembly	T	Fig. 2-4-8	(W4),(L4b),(P4a),(P4b)	4b	
(4c)	Drum assembly	T	Fig. 2-4-8	3(S4)	-	
(5a)	Guide roller (S) assembly	T	Fig. 2-4-9	(P5)	5a	
(5b)	Rail assembly	T	Fig. 2-4-9	3(W5a), (W5b)	5b, 5c	

(1) (2) (3) (4) (5) (6) (7)

2.2 JIGS AND TOOLS REQUIRED FOR DISASSEMBLY, ASSEMBLY AND ADJUSTMENT

2.2.1 Tools required for adjustments

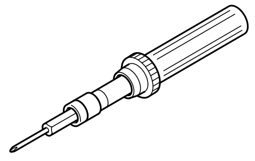
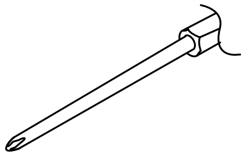
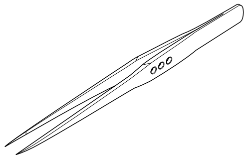
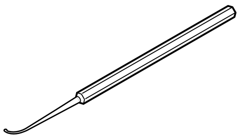
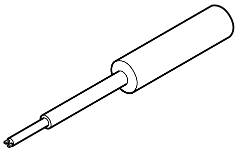
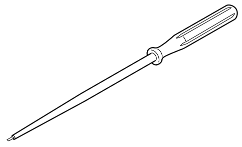
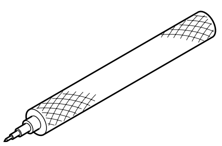
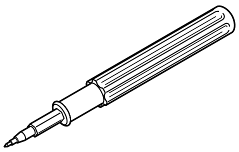
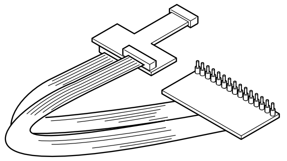
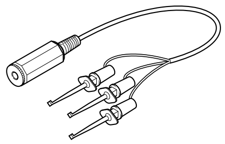
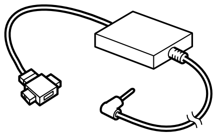
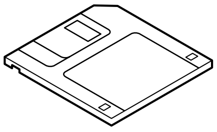
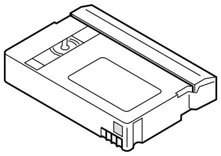
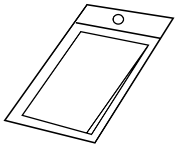
1 Torque Driver YTU94088	2 Bit YTU94088-003
	
3 Tweezers P-895	4 Chip IC Replacement Jig PTS40844-2
	
5 Guide Driver YTU94148A	6 Adjustment Driver YTU94028
	
7 Slit Washer Installation Jig YTU94121A	8 Slit Washer Installation Jig YTU94121B
	
9 Jig Connector cable YTU93082G	10 Communication cable YTU93107A
	
11 PC cable QAM0099-002	12 Service Support System YTU94057-52
	
13 Alignment Tape MC-1	14 Cleaning Cloth KSMM-01
	

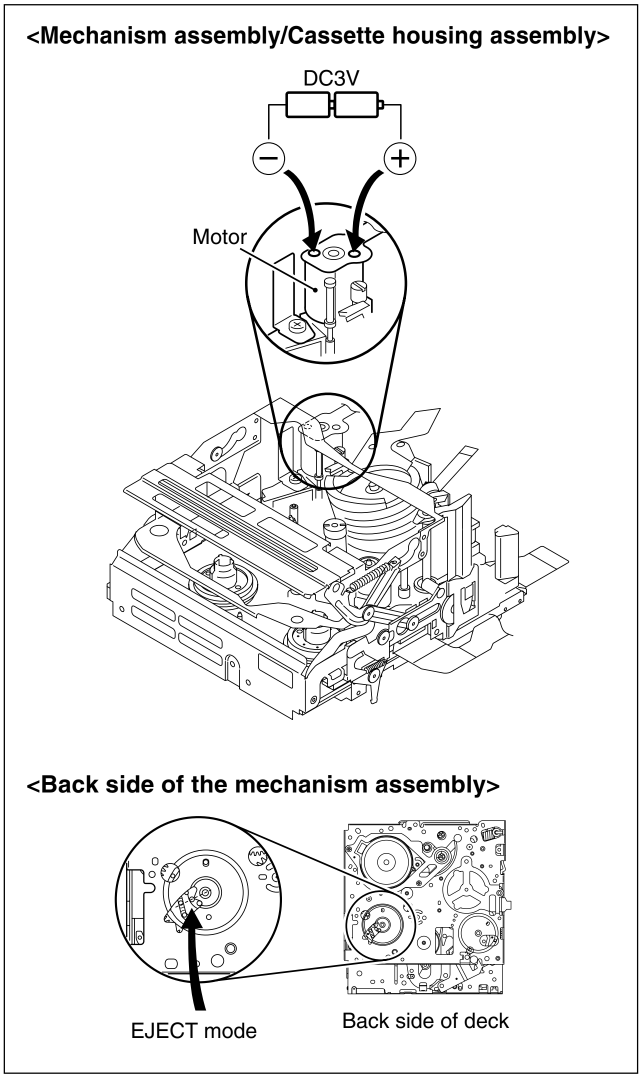
Table 2-2-1

1. **Torque Driver**
   Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.
2. **Bit**
   This bit is slightly longer than those set in conventional torque drivers.
3. **Tweezers**
   To be used for removing and installing parts and wires.
4. **Chip IC replacement Jig**
   To be used for adjustment of the camera system.
5. **Guide Driver**
   To be used to turn the guide roller to adjustment of the linarity of playback envelope.
6. **Adjustment Driver**
   To be used for adjustment.
7. **Slit washer Installation Jig**
   To be used to install slit washers.
8. **Slit washer Installation Jig (NEW TYPE)**
   To be used to install slit washers.
9. **Jig Connector cable**
   Connected to CN105 of the main board and used for electrical adjustment, etc.
10. **Communication cable**
    Connect the Communication cable between the PC cable and Jig connector cable when performing a PC adjustment.
11. **PC cable**
    To be used to connect the VideoMovie and a personal computer with each other when a personal computer is used for adjustment.
12. **Service Support System**
    To be used for adjustment with a personal computer.
13. **Alignment Tape**
    To be used for check and adjustment of interchangeability of the mechanism.
14. **Cleaning Cloth**
    Recommended cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

2.3 DISASSEMBLY/ASSEMBLY OF MECHANISM ASSEMBLY

2.3.1 General statement

The mechanism should generally be disassembled/assembled in the EJECT mode (ASSEMBLY mode). (Refer to Fig. 2-3-1.)
However, when the mechanism is removed from the main body, it is set in the STOP mode. Therefore, after the mechanism is removed from the main body, supply 3 V DC to the electrode on the top of the loading motor to enter the mechanism mode into the EJECT mode compulsory.



<Mechanism assembly/Cassette housing assembly>
DC3V
−
+
Motor
<Back side of the mechanism assembly>
EJECT mode
Back side of deck

Fig. 2-3-1

2.3.2 Explanation of mechanism mode

The mechanism mode of this model is classified into six modes as shown in Table 2-3-1. Each mechanism mode can be distinguished from others by the relative position of "○" mark on the sub cam gear to the inner or outer protrusion on the main deck.
Refer to Fig. 2-3-2 to 2-3-8 below.
The EJECT mode, C IN mode and SHORT FF mode should be recognized by the relative position of the "○" mark to the inner protrusion, while the STOP mode, REV mode and PLAY mode should be recognized by that to the outer protrusion.

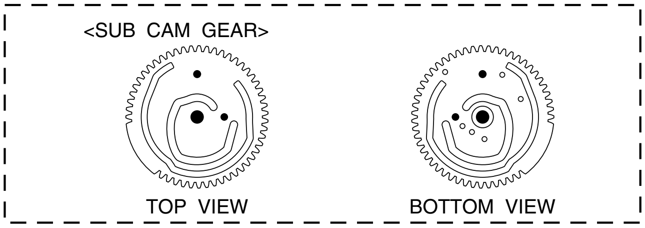


Fig. 2-3-2

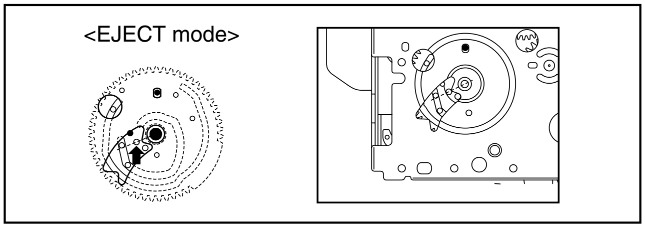


Fig. 2-3-3

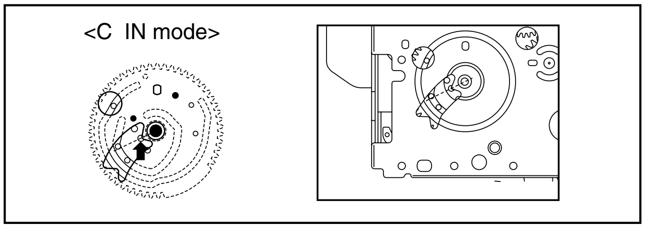


Fig. 2-3-4

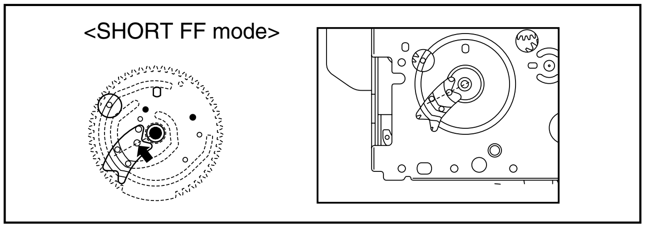


Fig. 2-3-5

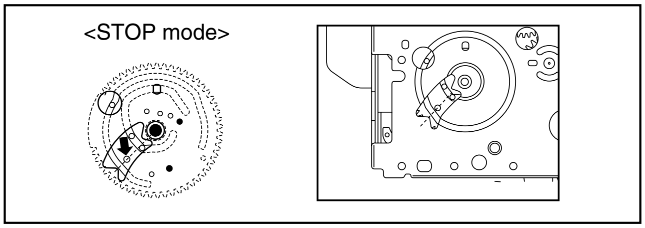


Fig. 2-3-6

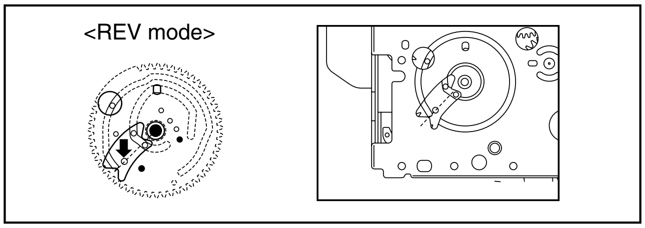


Fig. 2-3-7

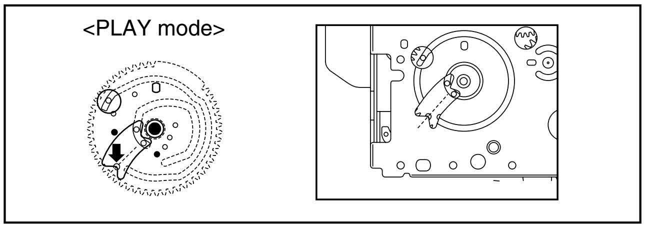


Fig. 2-3-8

2.3.3 Mechanism timing chart

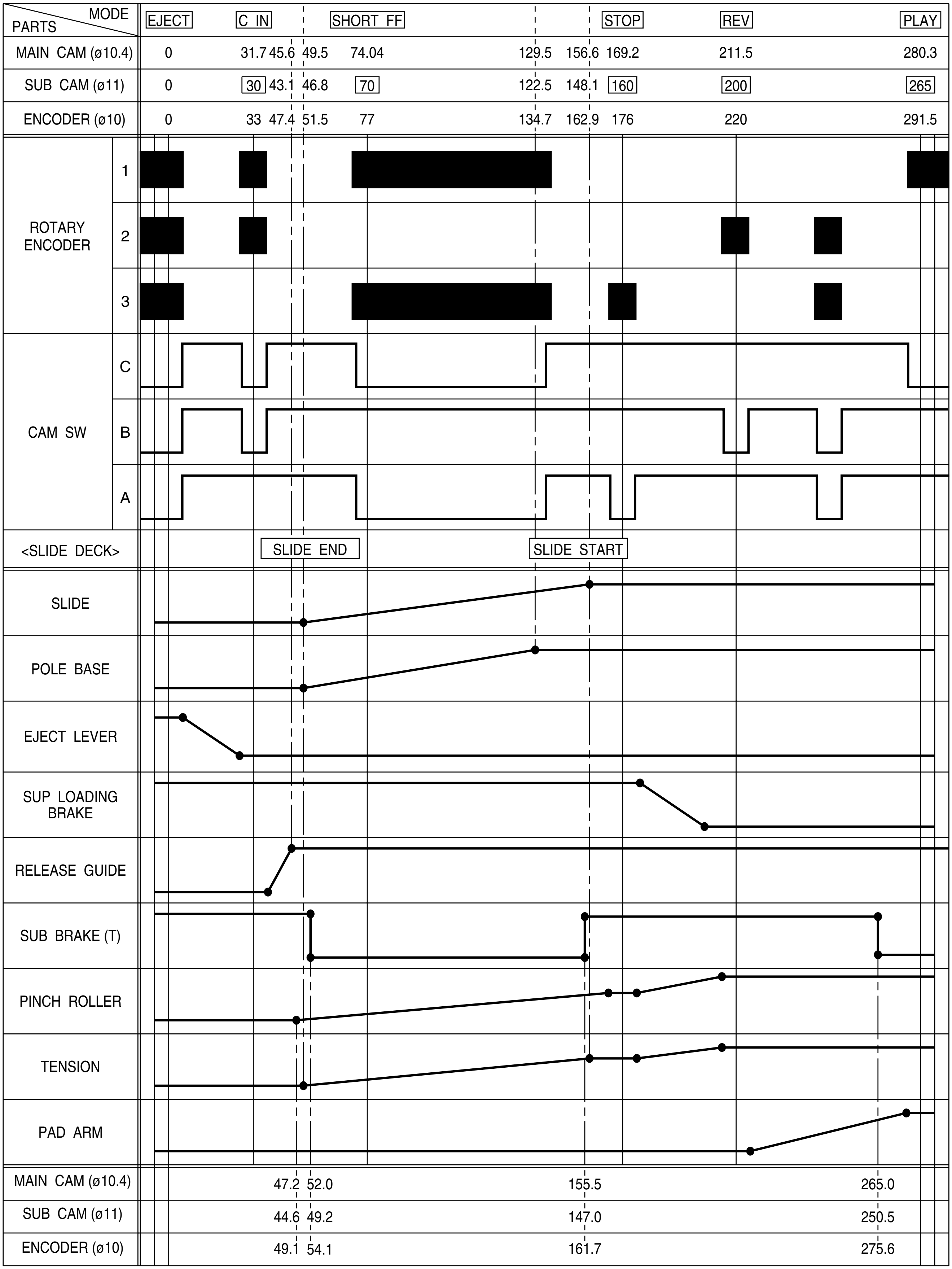

MODE
PARTS
EJECT
C IN
SHORT FF
STOP
REV
PLAY
MAIN CAM (ø10.4)
0
31.7
45.6
49.5
74.04
129.5
156.6
169.2
211.5
280.3
SUB CAM (ø11)
0
30
43.1
46.8
70
122.5
148.1
160
200
265
ENCODER (ø10)
0
33
47.4
51.5
77
134.7
162.9
176
220
291.5
ROTARY ENCODER
1
2
3
CAM SW
C
B
A
<SLIDE DECK>
SLIDE END
SLIDE START
SLIDE
POLE BASE
EJECT LEVER
SUP LOADING BRAKE
RELEASE GUIDE
SUB BRAKE (T)
PINCH ROLLER
TENSION
PAD ARM
MAIN CAM (ø10.4)
47.2
52.0
155.5
265.0
SUB CAM (ø11)
44.6
49.2
147.0
250.5
ENCODER (ø10)
49.1
54.1
161.7
275.6

Table 2-3-1

2.4 DISASSEMBLY/ASSEMBLY OF MECHANISM ASSEMBLY

2.4.1 Follow chart

1. Configuration

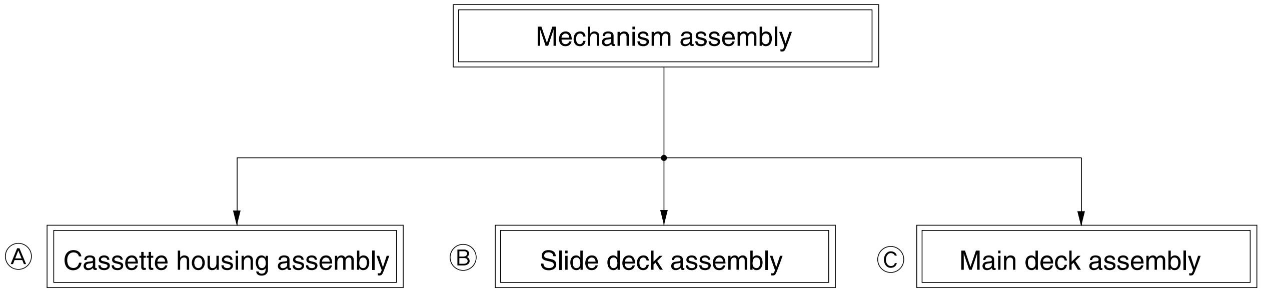

Mechanism assembly
Ⓐ Cassette housing assembly
Ⓑ Slide deck assembly
Ⓒ Main deck assembly

Fig. 2-4-1

2. Procedures for disassembly

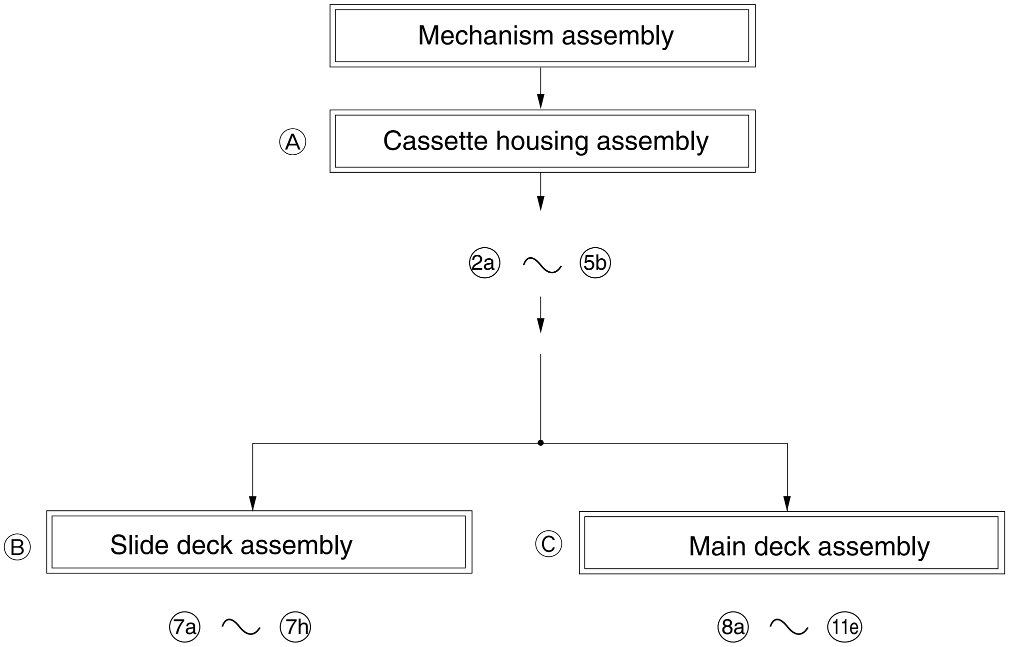

Mechanism assembly
Ⓐ Cassette housing assembly
(2a) ~ (5b)
Ⓑ Slide deck assembly
(7a) ~ (7h)
Ⓒ Main deck assembly
(8a) ~ (11e)

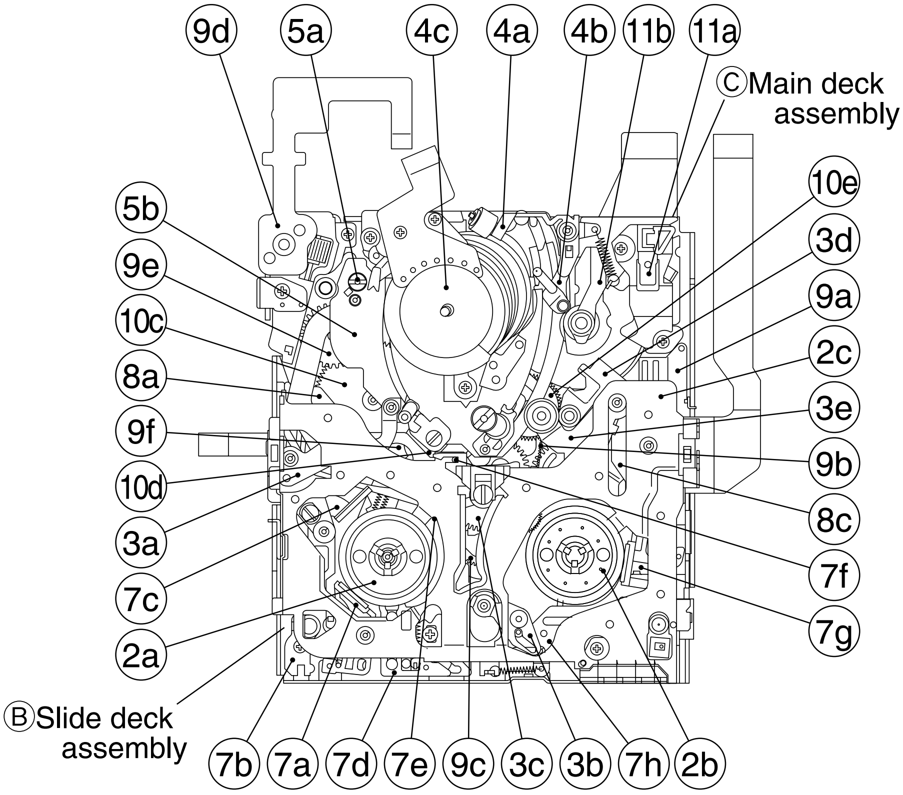
Fig. 2-4-2

3. Disassembling procedure table

NO.	PART NAME		FIG.	POINT	NOTE	REMARKS
Ⓐ	Cassette housing assembly	T	Fig. 2-4-5	3(S1),(L1a)-(L1d)	1a, 1b, 1c, 1d	Adjustment
2a	Reel disk (SUP) assembly	T	Fig. 2-4-6	(W2)	2a, 2b	
2b	Reel disk (TU) assembly	T		(W2)	2a, 2b	
2c	Reel cover assembly	T		(S2b),2(S2a),(W2)	2d	
3a	Tension arm assembly	T	Fig. 2-4-7	(W3a)	3b	
3b	Release guide assembly	T		-	3a	
3c	Idler arm assembly	T		(W3b)	-	
3d	Guide arm assembly	T		-	3a	
3e	Pinch roller arm assembly	T		(W3a)	-	
4a	Cleaner arm assembly	T	Fig. 2-4-8	(L4a)	4a	
4b	Slant pole arm assembly	T		(W4),(L4b),(P4a),(P4b)	4b	
4c	Drum assembly	T		3(S4)	-	
5a	Guide roller (S) assembly	T	Fig. 2-4-9	(P5)	5a	
5b	Rail assembly	T		3(W5a), (W5b)	5b, 5c	
Ⓑ	Slide deck assembly / Ⓒ Main deck assembly	T	Fig. 2-4-10	(W6),(L6a)-(L6d)	6a, 6b	(Adjustment)
Ⓑ	Slide deck assembly					
7a	Loading brake assembly	T	Fig. 2-4-11	(W7),(L7a),(P7a)	7e	Adjustment
7b	Guide pin (SUPPLY)	T		(S7a)	-	
7c	Pad arm assembly	T		(W7),(L7b),(P7b)	7d	
7d	Slide guide plate assembly	T		(S7b)	7c	Adjustment
7e	Collar	T		-	7a	
7f	Collar	T		-	7a	
7g	Sub brake assembly	T		(W7),(L7c),(P7c)	7b	
7h	Control plate assembly	T		2(W7),(L7d),(P7d)	7b	
Ⓒ	Main deck assembly					
8a	Tension lever assembly	T	Fig. 2-4-12	-	8c	
8b	Slide lever assembly	T		-	8b	
8c	Brake control lever assembly	T		-	8a	
9a	Loading guide	T	Fig. 2-4-13	(S9)	-	
9b	Timing belt	T		-	9b	
9c	Center gear assembly	T		-	-	
9d	Motor bracket assembly	T		2(S9)	9a	
9e	Worm wheel	T		(W9)	-	(Phase adjustment)
9f	Gear holder	T		(S9)	-	
10a	Main cam gear	T	Fig. 2-4-14	(S10)	10b	Phase adjustment
10b	Brake control plate	T		(L10)	10b	Phase adjustment
10c	Rotary encoder	T		(S10),(W10a)	10a	Phase adjustment
10d	Connect gear	T		(W10a)	-	(Phase adjustment)
10e	Reel drive pulley assembly	T		(W10b)	-	
11a	Catcher (T) assembly	T	Fig. 2-4-15	2(S11)	-	
11b	Capstan motor	T		2(S11)	-	
11c	Charge arm assembly	T		(W11)	11	
11d	Sub cam gear	T		(S11)	-	Phase adjustment
11e	PWB holder	B		2(S11)	-	

Table 2-4-1

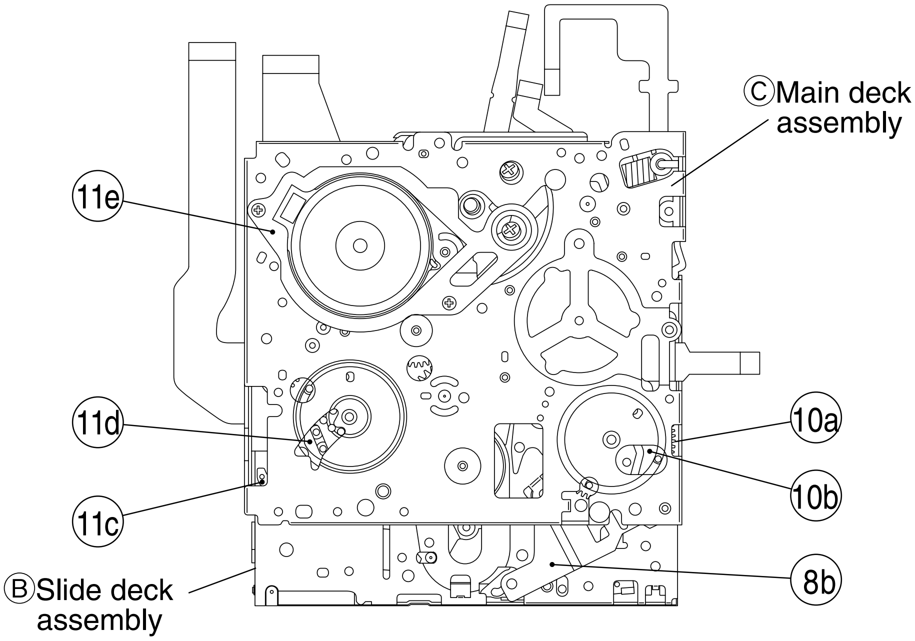
< TOP VIEW >



9d
5a
4c
4a
4b
11b
11a
Ⓒ Main deck assembly
10e
3d
9a
2c
3e
9b
8c
7f
7g
5b
9e
10c
8a
9f
10d
3a
7c
2a
Ⓑ Slide deck assembly
7b
7a
7d
7e
9c
3c
3b
7h
2b

Fig. 2-4-3

< BOTTOM VIEW >



Ⓒ Main deck assembly
11e
11d
11c
Ⓑ Slide deck assembly
10a
10b
8b

Fig. 2-4-4

2.4.2 Disassembly/assembly

1. Ⓐ Cassette housing assembly

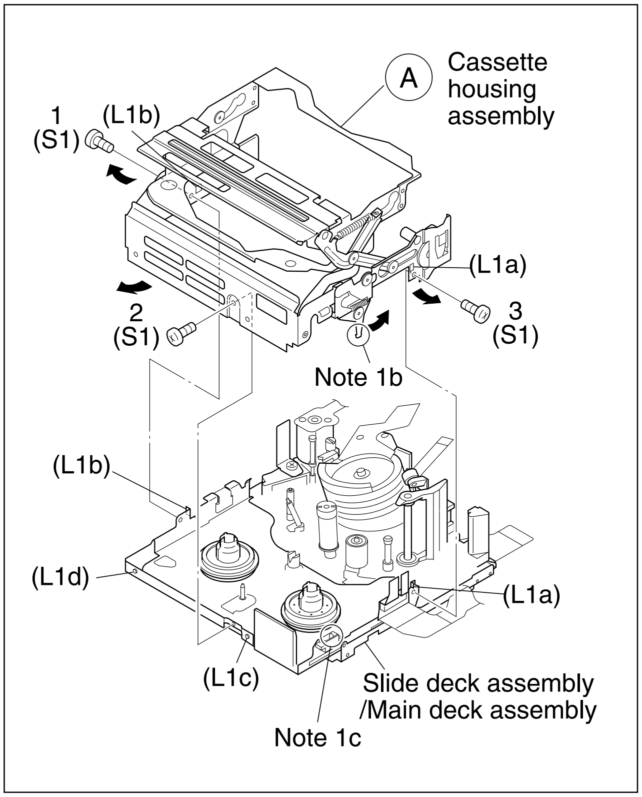
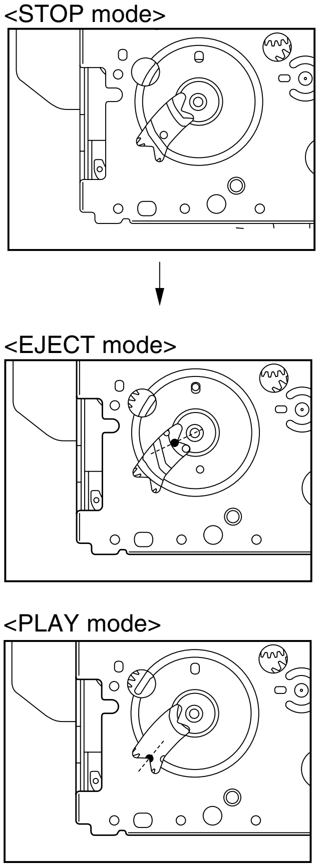

A
Cassette housing assembly
1
(S1)
(L1b)
(L1a)
2
(S1)
3
(S1)
Note 1b
(L1b)
(L1d)
(L1a)
(L1c)
Slide deck assembly /Main deck assembly
Note 1c

Fig. 2-4-5



Note 1a:
Shift the mechanism mode from the STOP mode to the EJECT mode.

Note 1b:
Reassemble the cassette housing assembly to the mechanism as the cancel lever is moved in the direction of the arrow.

Note 1c:
When reassembling the cassette housing to the mechanism, make sure that there is no deformation in the frame or no damage to the switches, etc.

Note 1d:
After reassembling the component parts, check the mechanism operation in the PLAY mode.
For details of checking method, refer to "2.6.1 assembling slide deck assembly and main deck assembly".

2. (2a) Reel disk (SUP) assembly
(2b) Reel disk (TU) assembly
(2c) Reel cover assembly

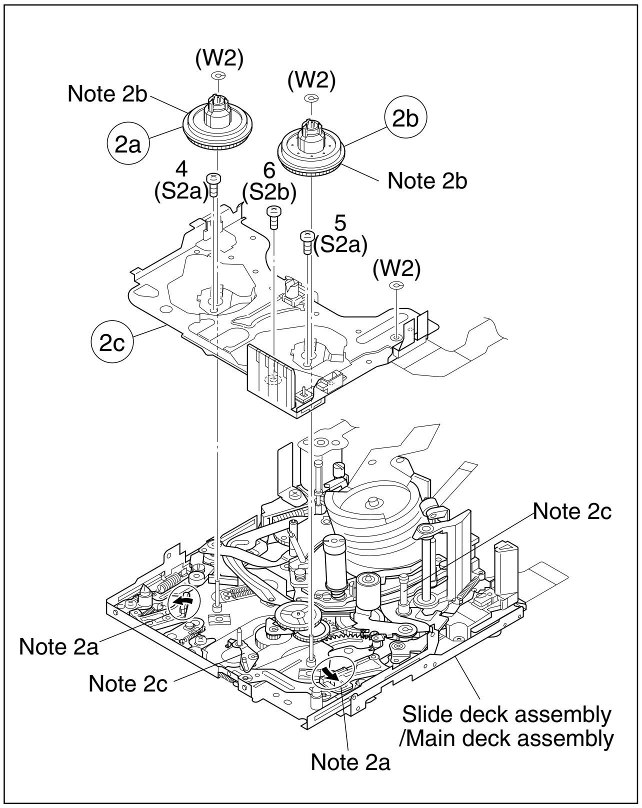
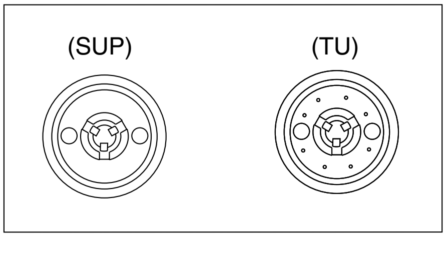

(W2)
(W2)
Note 2b
2a
2b
4
(S2a)
6
(S2b)
Note 2b
5
(S2a)
(W2)
2c
Note 2c
Note 2a
Note 2c
Slide deck assembly /Main deck assembly
Note 2a

Fig. 2-4-6

Note 2a:
When removing the reel disk assembly, be careful not to break the brake pad which applies lateral pressure to the reel disk.

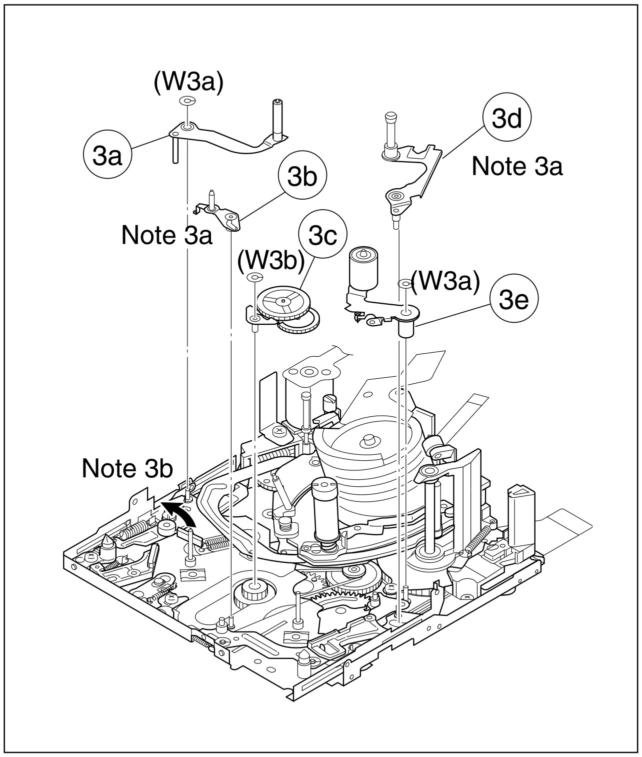
Note 2b:
Be careful not to make a mistake in installing the reel disk. The SUP reel disk and TU reel disk can be distinguished from each other by the appearance as shown below.



Note 2c:
When reassembling the cassette housing to the mechanism, make sure that there is no deformation in the frame or no damage to the switches, etc.

Note 2d:
When fitting the reel cover assembly to the set, carefully tighten the screw with the specified tightening torque of 0.069N•m (0.7kgf•cm).

3. ⓷a Tension arm assembly/ ⓷b Release guide assembly ⓷b Idler arm assembly/ ⓷d Guide arm assembly ⓷c Pinch roller arm assembly

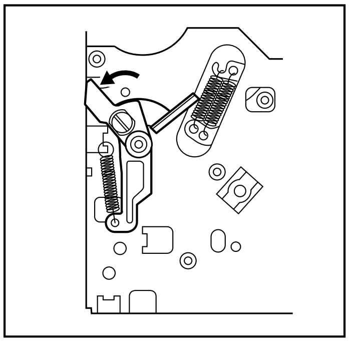


(W3a)
3d
3a
3b
Note 3a
Note 3a
3c
(W3b)
(W3a)
3e
Note 3b

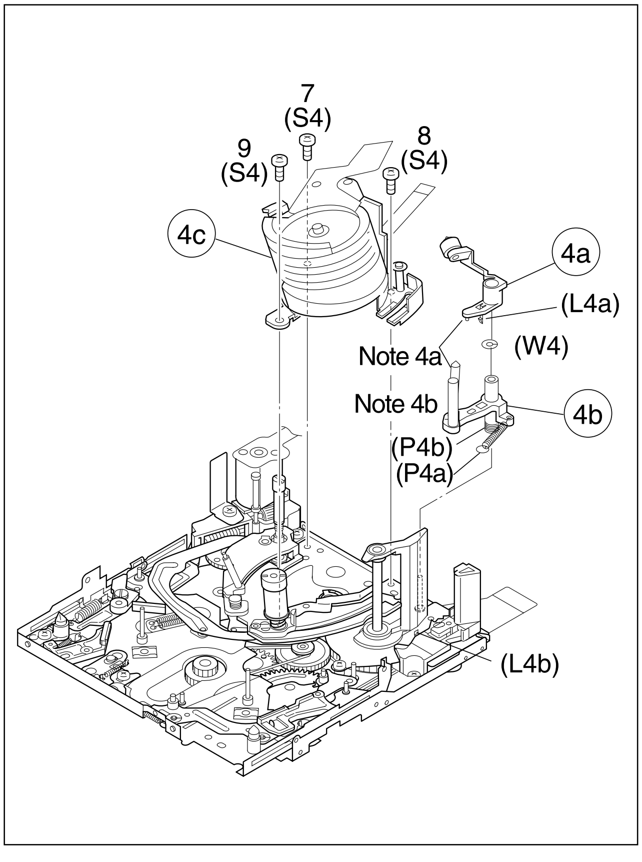
Fig. 2-4-7

Note 3a:
When removing the reel cover assembly, pay heed to release guide assembly and guide arm assembly. For, the guide arm assembly is just inserted into the slide deck assembly from the upside and it is apt to come off after the reel cover assembly is removed.

Note 3b:
Reassemble the tension arm assembly to the mechanism as the pad arm assembly is moved to the extent in the direction of the arrow.



4. ⓸a Cleaner arm assembly/ ⓸b Slant pole arm assembly ⓸b Drum assembly

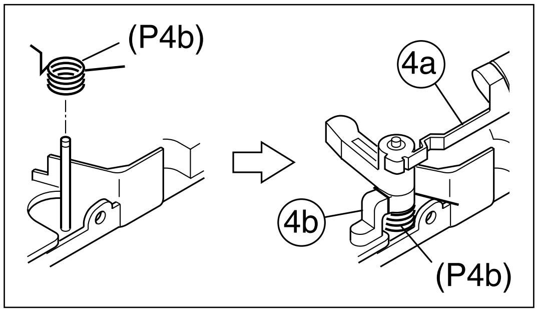


7
(S4)
9
(S4)
8
(S4)
4c
4a
(L4a)
Note 4a
(W4)
Note 4b
4b
(P4b)
(P4a)
(L4b)

Fig. 2-4-8

Note 4a:
When removing the cleaner arm assembly, it is recommended to remove the slant pole arm assembly together with it except the case of a single unit replacement, because the hook (L4a) is hard to disengage.

Note 4b:
How to set the coil spring (P4b).



(P4b)
4a
4b
(P4b)

5. 5a Guide roller (SUPPLY) assembly/ 5b Rail assembly

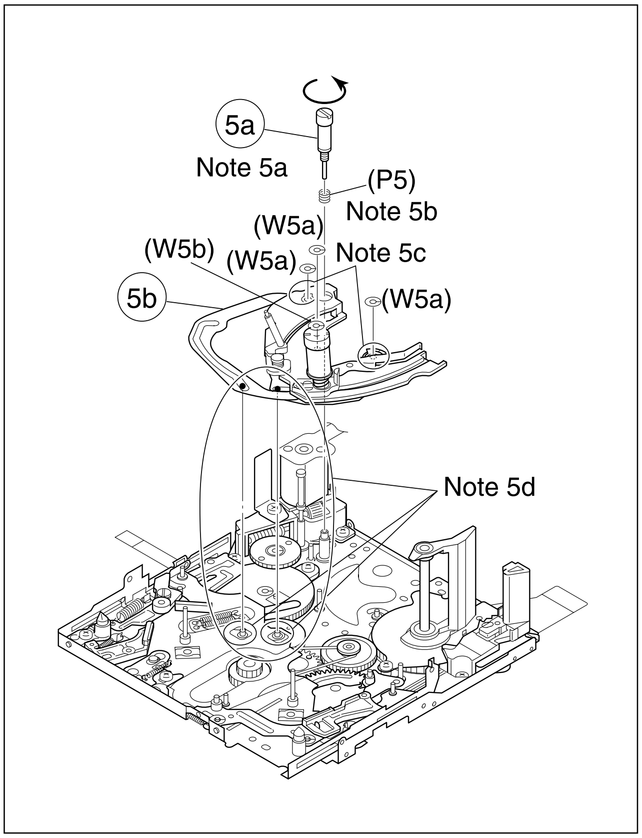
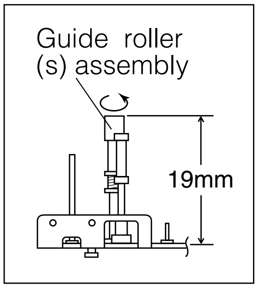

5a
Note 5a
(P5)
Note 5b
(W5a)
(W5b)
(W5a)
Note 5c
5b
(W5a)
Note 5d

Fig. 2-4-9

Note 5a:
When reassembling, insert the tip of the guide roller with the coil spring put on it into the hole on the main deck. Tighten the guide roller by about 6 turns so that the height of the guide roller assembly is 19 mm or so as shown in the figure.


Guide roller
(s) assembly
19mm

Note 5b:
Pay careful attention to the spring not to lose it.

Note 5c:
Pay careful attention to the engagement of the rail assembly's arm ends because they easily come off the engagement. Moreover, make sure that there is neither deformation nor damage observed in them.

Note 5d:
When removing the rail assembly, check to see if the collar is securely set in the arm groove.

6. Ⓑ Slide deck assembly/ Ⓒ Main deck assembly

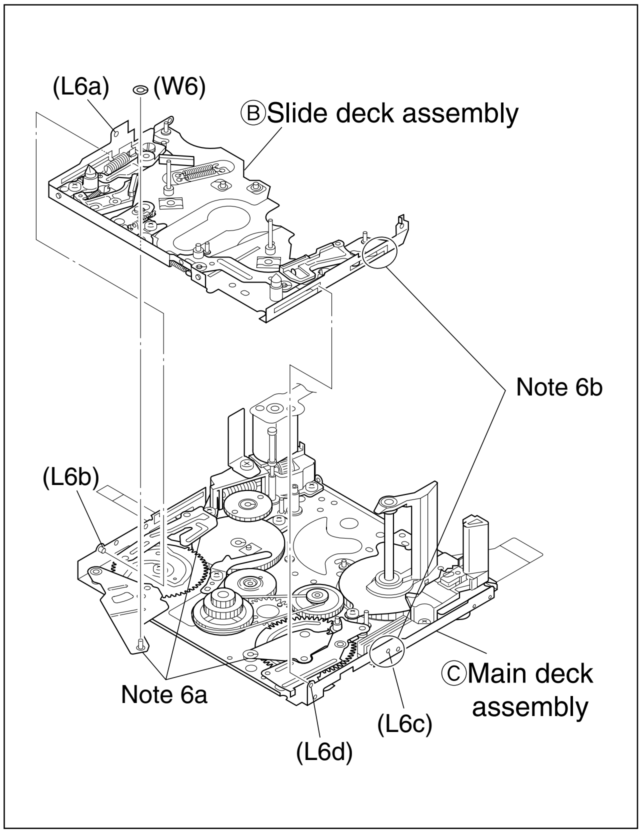
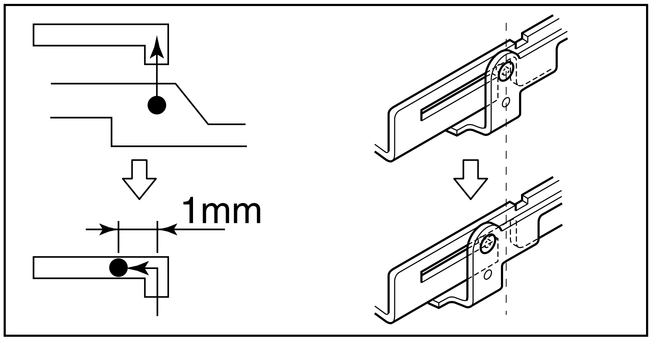

(L6a)
(W6)
Ⓑ Slide deck assembly
Note 6b
(L6b)
Note 6a
Ⓒ Main deck assembly
(L6c)
(L6d)

Fig. 2-4-10

Note 6a:
When removing the slide deck assembly, pay heed to the three components of the following because they are apt to come off after the slide deck assembly is removed.

8a *Tension lever assembly/* 8b *Slide lever assembly*
8c *Brake control lever assembly*
For reassembling those components, refer to Fig. 2-4-12.

Note 6b:
When reassembling the slide deck assembly to the main deck assembly, combine them with each other by the side grooves and then slide the slide deck assembly by 1 mm or so.



7. 7a Loading brake assembly/ 7b Guide pin (S) 7c Pad arm assembly/ 7d Slide guide plate assembly 7e Collar/ 7f Collar/ 7g Sub brake assembly 7h Control plate assembly

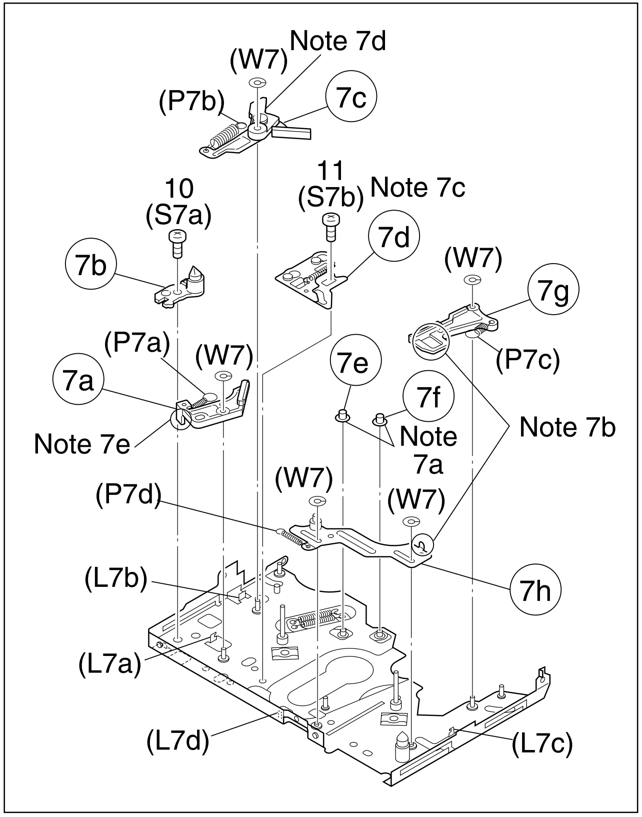


Fig. 2-4-11

8. 8a Tension lever assembly/ 8b Slide lever assembly 8c Brake control lever assembly

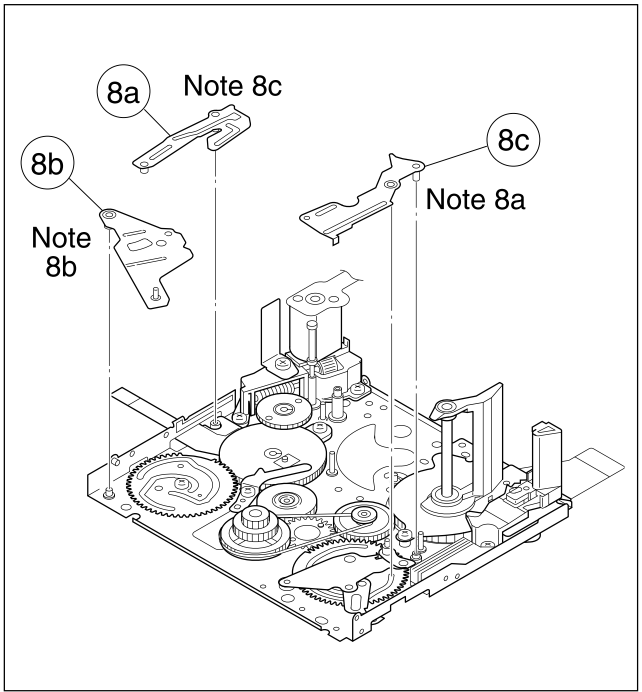
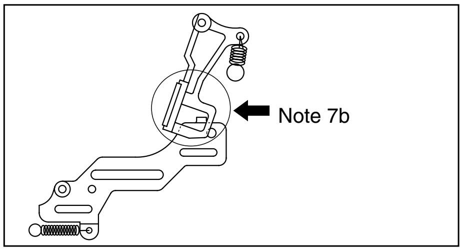


Fig. 2-4-12

Note 7a:
Don't remove these parts unreasonably. If they are removed for some reason, be very careful not to lose them.

Note 7b:
When reinstalling the sub brake assembly, set the control plate assembly so that its hook is set in the □ part of the sub brake assembly.



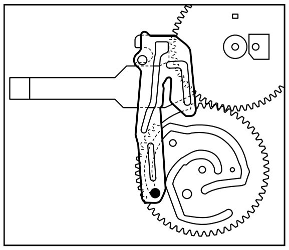
Note 7c:
Since the slide guide plate assembly controls the slide deck assembly so that it exactly slides the main deck assembly, it must exactly be assembled in the PLAY mode. Therefore, temporarily fix the slide guide plate assembly in this stage. For details of reassembling procedure, refer to "2.6.1 Assembling slide deck assembly and main deck assembly" .

Note 7d:
The pad arm assembly controls the tension level of the tension arm assembly. For adjustment of the tension arm assembly, refer to "2.6.2 Locating tension pole".

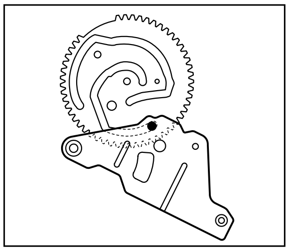
Note 7e:
When reinstalling the load brake assembly, slightly lift the slide deck assembly upwards because the lower part of the load brake assembly sticks out of the slide deck assembly.

Note 8a, 8b, 8c:
For refitting the respective parts, refer to the following figures

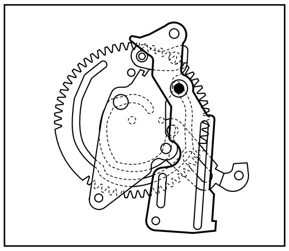
8a Tension lever assembly



8b Slide lever assembly



8c Brake control lever assembly



9. 9a Loading guide/ 9b Timing belt
9c Center gear assembly/ 9d Motor bracket assembly
9e Worm wheel/ 9f Gear holder

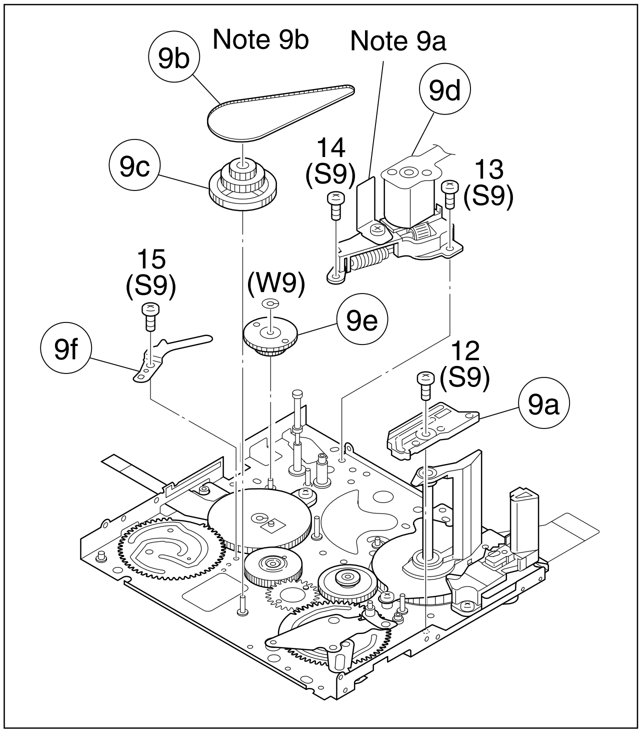

9b
Note 9b
Note 9a
9d
9c
14
(S9)
13
(S9)
15
(S9)
(W9)
9e
9f
12
(S9)
9a

Fig. 2-4-13

Note 9a:
Carefully handle the DEW sensor. (Don't touch the sensor surface in particular.)

Note 9b:
When engaging the timing belt, make sure that it securely engages with the gears of both the center gear assembly and reel drive pulley assembly.

10. 10a Main cam gear/ 10b Brake control plate
10c Rotary encoder/ 10d Connect gear
10e Reel drive pulley assembly

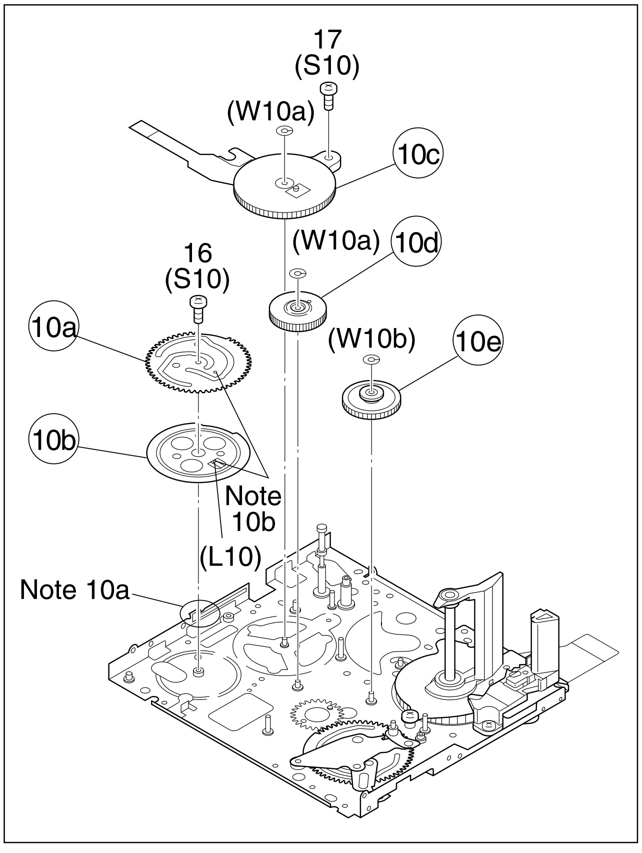
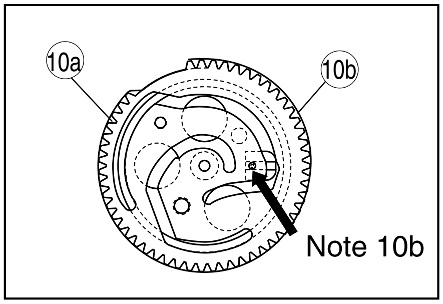

17
(S10)
(W10a)
10c
(W10a)
10d
16
(S10)
10a
(W10b)
10e
10b
Note
10b
(L10)
Note 10a

Fig. 2-4-14

Note 10a:
When removing/refitting parts, pay careful attention to the flexible board and so on not to damage them.

Note 10b:
When reinstalling the main cam gear and the brake control plate, first fit them together so that the protrusion on the brake control plate is set in the slot on the main cam gear as shown below, next install the two together to the main deck assembly.


10a
10b
Note 10b

11. 11a Catcher (T) assembly/ 11b Capstan motor 11c Charge arm assembly/ 11d Sub cam gear 11e PWB holder

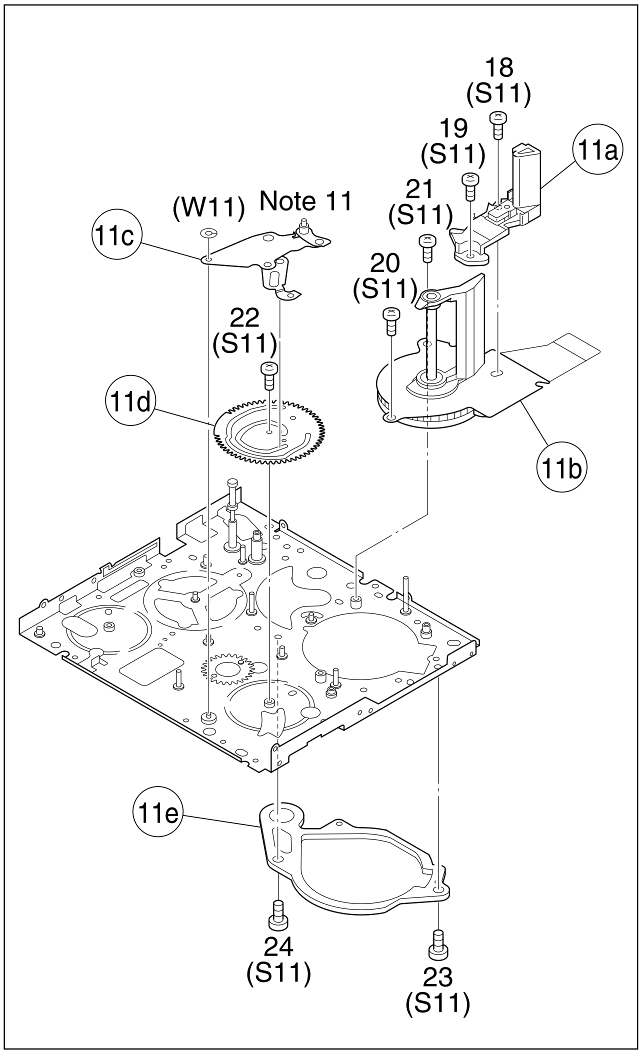
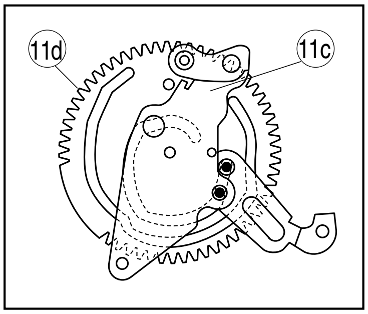
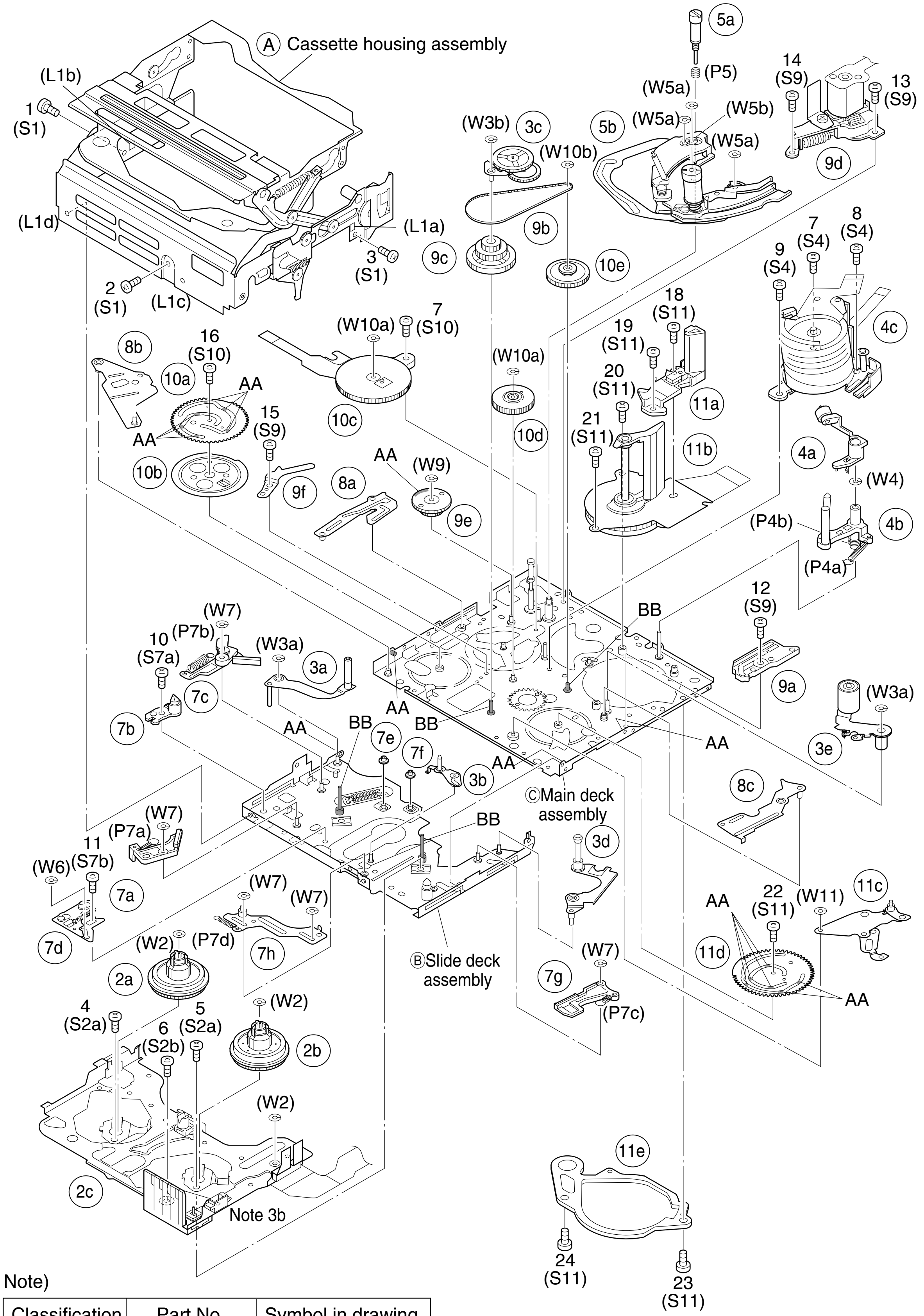

18
(S11)
19
(S11)
11a
21
(S11)
(W11)
Note 11
11c
20
(S11)
22
(S11)
11d
11b
11e
24
(S11)
23
(S11)

Fig. 2-4-15

Note 11:
The following figure shows how to put the charge arm assembly and sub cam gear assembly together.



2.4.3 List of procedures for disassembly

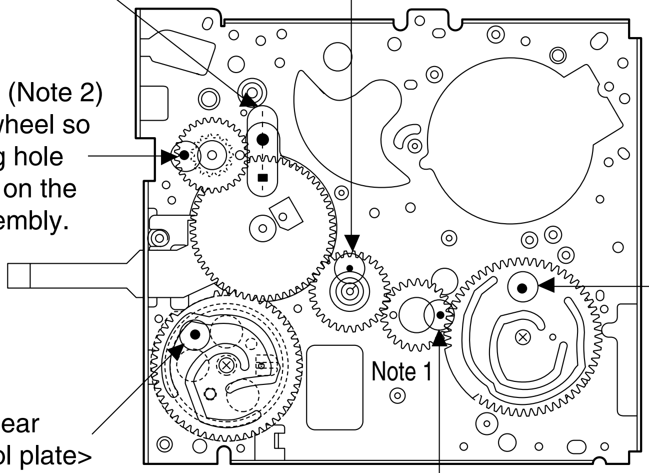

A Cassette housing assembly
(L1b)
1
(S1)
(L1d)
(L1a)
3
(S1)
2
(S1)
(L1c)
5a
(P5)
(W5a)
(W5b)
(W5a)
(W5a)
5b
(W3b)
3c
(W10b)
9b
9c
10e
14
(S9)
13
(S9)
9d
7
(S4)
8
(S4)
9
(S4)
4c
18
(S11)
19
(S11)
20
(S11)
11a
21
(S11)
11b
4a
(W4)
(P4b)
4b
(P4a)
(W10a)
7
(S10)
10c
(W10a)
10d
8b
16
(S10)
10a
AA
AA
15
(S9)
10b
9f
8a
AA
(W9)
9e
BB
12
(S9)
9a
(W3a)
3e
(W7)
10
(S7a)
(P7b)
(W3a)
3a
7c
7b
AA
AA
BB
BB
7e
7f
AA
3b
AA
AA
C Main deck assembly
8c
BB
3d
11
(S7b)
(P7a)
(W7)
(W6)
7a
7d
(W7)
(W7)
(W2)
(P7d)
7h
B Slide deck assembly
(W7)
7g
(P7c)
AA
22
(S11)
(W11)
11c
11d
AA
2a
4
(S2a)
5
(S2a)
6
(S2b)
(W2)
2b
(W2)
2c
Note 3b
11e
24
(S11)
23
(S11)

Note)

Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-P	AA
Oil	YTU94027	BB

Fig. 2-4-16

2.5 CHECKUP AND ADJUSTMENT OF MECHANISM PHASE



<Rotary encoder>
Set the "■" of the rotary
part at the tapped hole
as shown in the figure.

<Connect gear> (Note 2)
Set the connect gear so
that its locating hole meets
the hole on the main deck
assembly.

<Worm wheel> (Note 2)
Set the worm wheel so
that its locating hole
meets the hole on the
main deck assembly.

<Sub cam gear>
Set the sub cam gear
so that its locating hole
meets the hole on the
main deck assembly.
This state represents
that the mechanism is
in the EJECT mode,
which is the "mechanism
assembly mode".

<Main cam gear
/Brake control plate>
After fitting the main cam\
gear and brake control plat
together,set them together
so that their locating holes
meet the hole on the main \
deck assembly.

<Connect gear 2> (Note 2)
Set the connect gear 2 so
that its locating hole meets
the hole on the main deck
assembly.

Note 1:
Since the connect gear 2 is tightly fixed to the main deck by caulking, adjust its phase with the connect gear and sub cam gear.

Note 2:
The part that needs phase adjustment by the hole on the main deck assembly must exactly be set as the specified phase. There is a fear that some part is installed in a wrong phase because assembling of the mechanism is automated. If so, set every part in the correct phase whenever the mechanism is reassembled.

Fig. 2-5-1

2.6 MECHANISM ADJUSTMENTS

2.6.1 Assembling slide deck assembly and main deck assembly

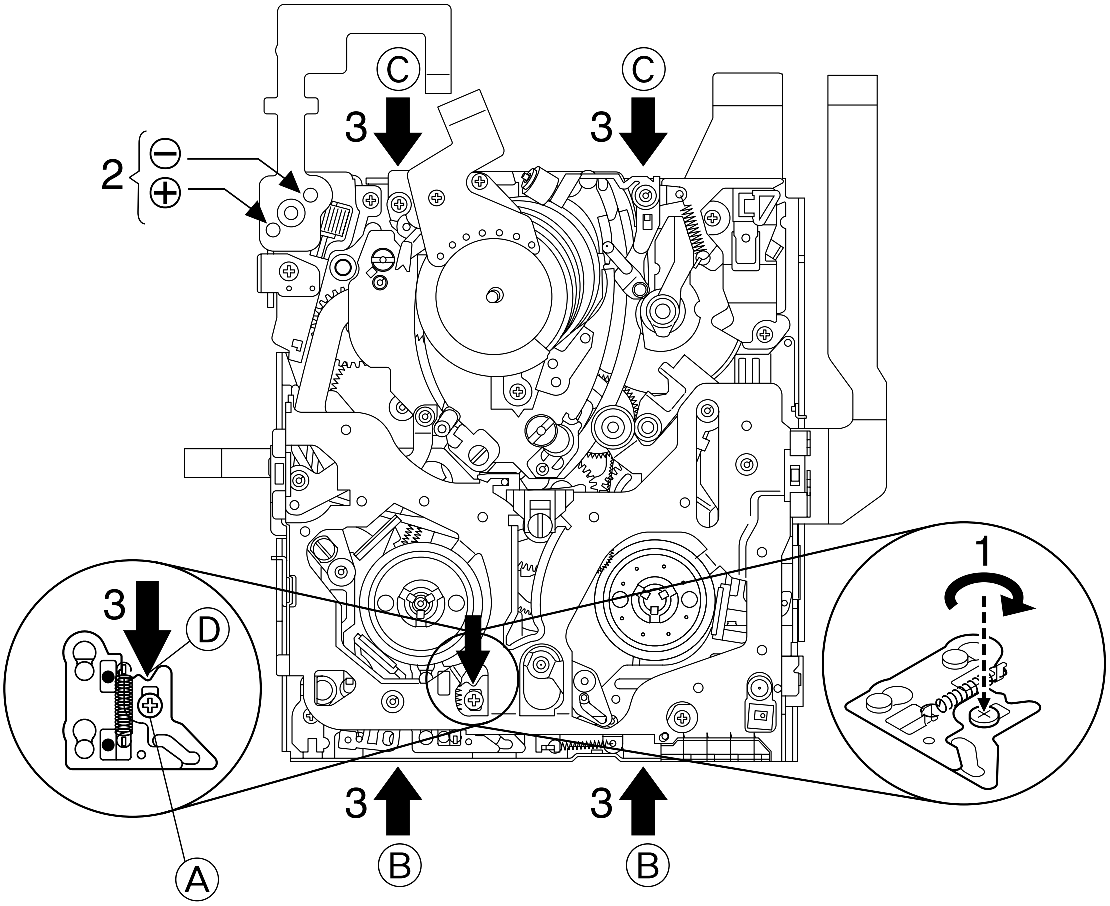


Fig. 2-6-1

Assembling procedure

1. Loosen the screw Ⓐ.
2. Set the mechanism in the PLAY mode.
   (Refer to "2.3.2 Explanation of mechanism mode".)
3. Press the end face B of the slide deck assembly (reel disk side) and the end face Ⓒ of the main deck assembly (drum assembly side) with uniform force so that the two assemblies are tightly pressed to each other. Furthermore, press the part Ⓓ and tighten the screw Ⓐ.

Note : *Tightening torque for screw Ⓐ: 0.069 N·m (0.7 kgf·cm)*

2.6.2 Locating tension pole

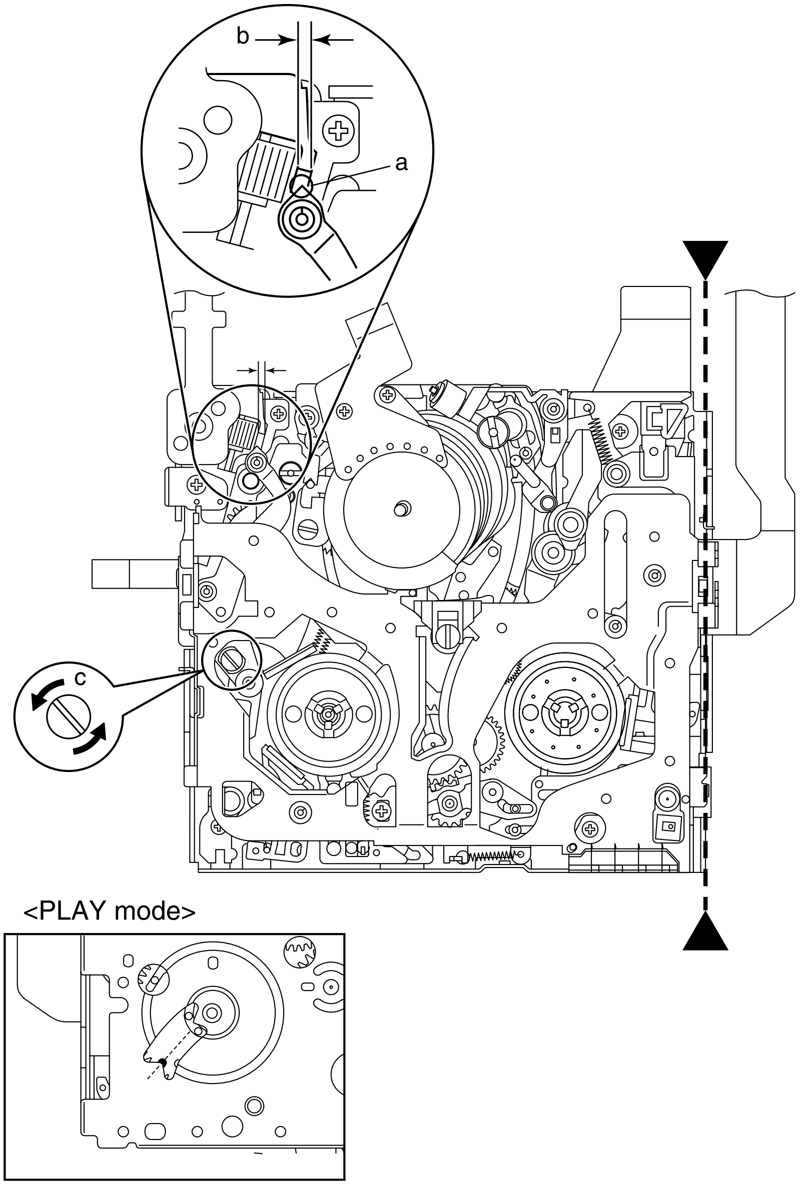


Fig. 2-6-2

Locating procedure

1. Enter the mechanism assembly into the PLAY mode. (Refer to "2.3.2 Explanation of mechanism mode".)
2. When the " ►-----◄ " part is positioned down, make sure that the part "a" of the tension arm assembly is located within the range of "b".
3. If the part "a" is out of the range, turn the pin "c" to adjust the position.

2.7 SERVICE NOTE

Use the following chart to manage mechanism parts that are removed for disassembling the mechanism.

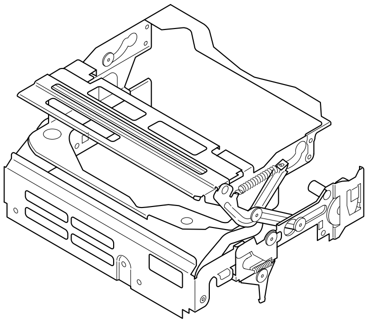
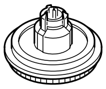
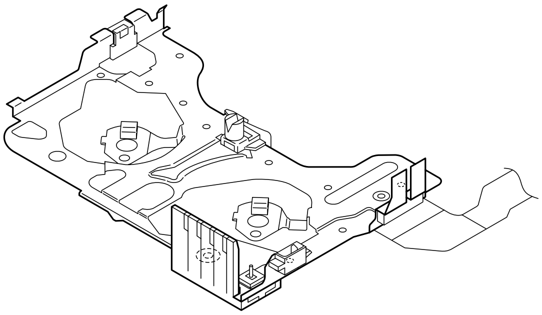
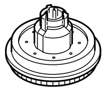
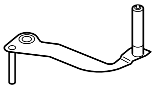
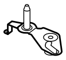
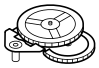
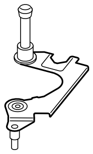
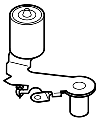
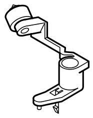
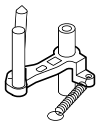
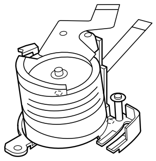
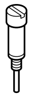
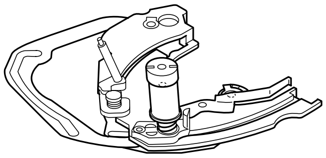
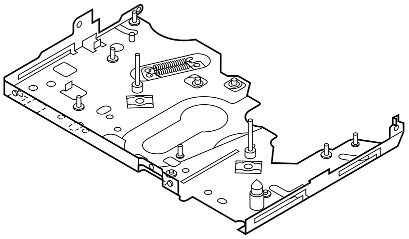
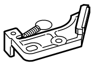
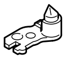
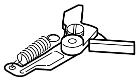
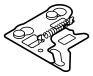
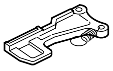
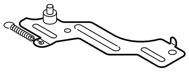
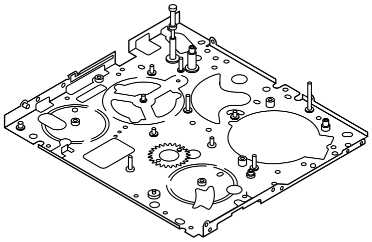
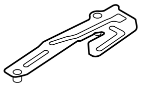
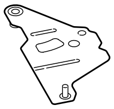
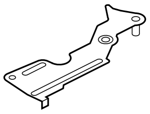
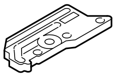
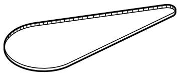
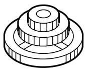
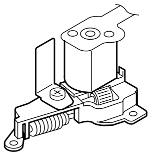
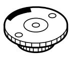
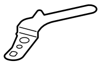
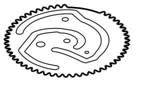
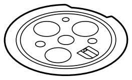
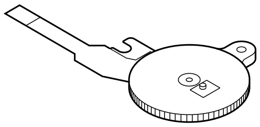
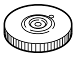
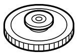
<table>
<tr><td>1</td><td colspan="5">Ⓐ Cassette housing assembly

S1×3</td></tr>
<tr><td rowspan="2">2</td><td colspan="2">(2a) Reel disk (SUP) assembly

W2×1</td><td colspan="3" rowspan="2">(2c) Reel cover assembly

S2a×2 S2b×1 W2×1</td></tr>
<tr><td colspan="2">(2b) Reel disk (TU) assembly

W2×1</td></tr>
<tr><td>3</td><td>(3a) Tension arm assembly

W3a×1</td><td>(3b) Release guide assembly
</td><td>(3c) Idler arm assembly

W3b×1</td><td>(3d) Guide arm assembly
</td><td>(3e) Pinch roller arm assembly

W3a×1</td></tr>
<tr><td>4</td><td colspan="2">(4a) Cleaner arm assembly
</td><td>(4b) Slant pole arm assembly

W4×1 P4a×1 P4b×1</td><td colspan="2">(4c) Drum assembly

S4×3</td></tr>
<tr><td>5</td><td colspan="2">(5a) Guide roller (S) assembly

P5×1</td><td colspan="3">(5b) Rail assembly

W5a×3 W5b×1</td></tr>
</table>

Table 2-7-1a

6	Ⓑ Slide deck assembly  W6×1	7	(7a) Loading brake assembly  W7×1 P7a×1	(7b) Guide pin (SUPPLY)  S7a×1	(7c) Pad arm assembly  W7×1 P7b×1	(7d) Slide guide plate assembly  S7b×1 W7×1
			(7e) Collar 	(7f) Collar 	(7g) Sub brake assembly  W7×1 P7c×1	(7h) Control plate assembly  W7×2 P7d×1

8	Ⓒ Main deck assembly 	(8a) Tension lever assembly 	(8b) Slide lever assembly 	(8c) Brake control lever assembly 

9	(9a) Loading guide  S9×1	(9b) Timing belt 	(9c) Center gear assembly 	(9d) Motor bracket assembly  S9×2	(9e) Worm wheel  W9×1	(9f) Gear holder  S9×1

10	(10a) Main cam gear  S10×1	(10b) Brake control plate 	(10c) Rotary encoder  S10×1 W10a×1	(10d) Connect gear  W10a×1	(10e) Reel drive pulley assembly  W10b×1

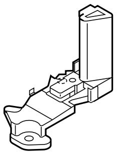
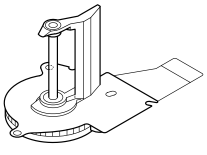
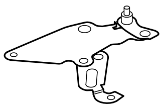
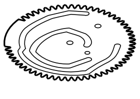
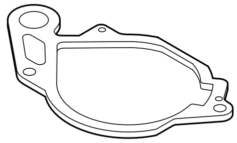
11	(11a) Catcher (T) assembly  S11×2	(11b) Capstan motor  S11×2	(11c) Charge arm assembly  W11×1	(11d) Sub cam gear  S11×1	(11e) PWB holder  S11×2

Table 2-7-1b

2.8 JIG CONNECTOR CABLE CONNECTION

Remove one screw (1) first and the cover (JIG) next.

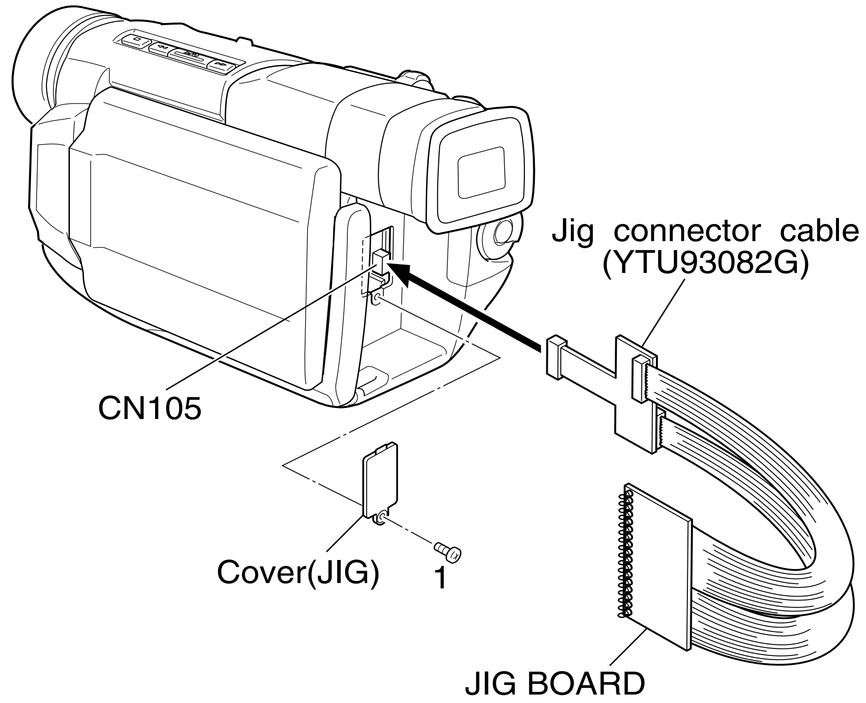
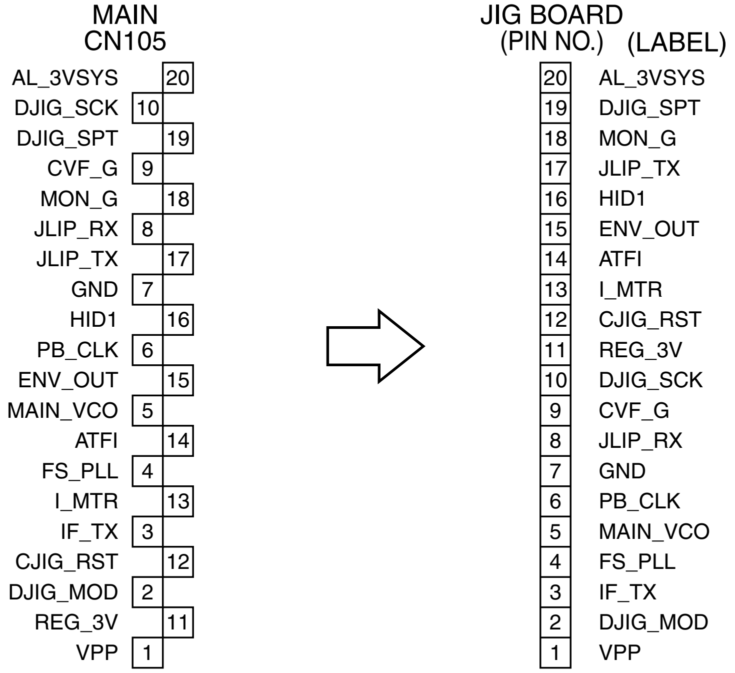


Fig. 2-8-1 Jig connector cable connection



MAIN
CN105

Signal	Pin
AL_3VSYS	20
DJIG_SCK	10
DJIG_SPT	19
CVF_G	9
MON_G	18
JLIP_RX	8
JLIP_TX	17
GND	7
HID1	16
PB_CLK	6
ENV_OUT	15
MAIN_VCO	5
ATFI	14
FS_PLL	4
I_MTR	13
IF_TX	3
CJIG_RST	12
DJIG_MOD	2
REG_3V	11
VPP	1

JIG BOARD

(PIN NO.)	(LABEL)
20	AL_3VSYS
19	DJIG_SPT
18	MON_G
17	JLIP_TX
16	HID1
15	ENV_OUT
14	ATFI
13	I_MTR
12	CJIG_RST
11	REG_3V
10	DJIG_SCK
9	CVF_G
8	JLIP_RX
7	GND
6	PB_CLK
5	MAIN_VCO
4	FS_PLL
3	IF_TX
2	DJIG_MOD
1	VPP

Fig. 2-8-2 Jig connector cable schematic diagram

SECTION 3
ELECTRICAL ADJUSTMENT

3.1 PRECAUTION

1. Precaution

Both the camera and deck sections of this model needs a personal computer for adjustment except simple adjustment with potentiometers. If some of the following parts is replaced for repair or other reason, the repaired set must be adjusted with a personal computer.

- OP block
- E^2PROM (IC1003 of MAIN board)
- MONITOR
- E^2PROM (IC7603 of MONITOR board)

In the event of malfunction with electrical circuits, trouble-shooting with the aid of proper test instruments most be done first, and then commence necessary repair, replacement and adjustment, etc.

1. In case of wiring to chip test points for measurement, use IC clips, etc. to avoid any stress.
2. Since connectors are fragile, carefully handle them in disconnecting and connecting.
3. Shortcircuit between operation un it and DECK chassis.

2. Required test equipment

1. Color TV monitor.
2. AC power adapter/charger
3. Oscilloscope (dual-trace type, observable 100 MHz or higher frequency)

Note : *It is recommended to use one observable 300 MHz or higher frequency.*

4. Digital voltmeter
5. Frequency counter (with threshold level adjuster)
6. Personal computer

3. Tools required for adjustments

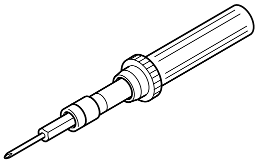
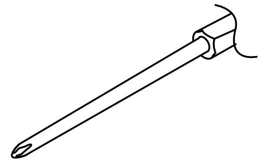
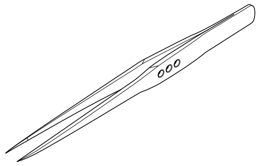
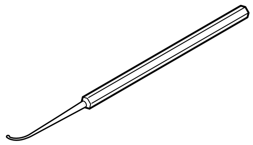
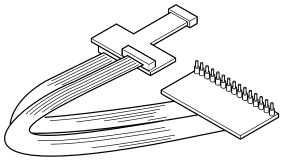
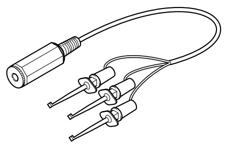
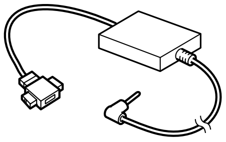
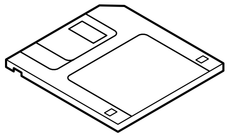
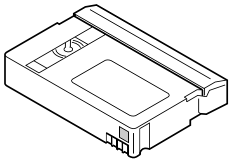
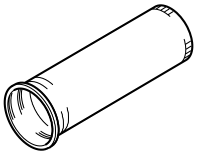
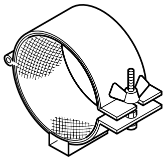
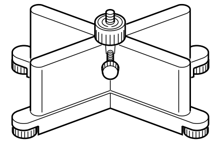
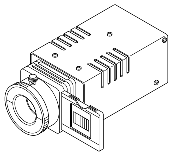
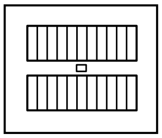
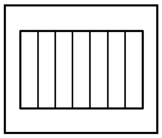
1 Torque Driver YTU94088	2 Bit YTU94088-003
	
3 Tweezers P-895	4 Chip IC Replacement Jig PTS40844-2
	
5 Jig Connector Cable YTU93082G	6 Communication Cable YTU93107A
	
7 PC Cable QAM0099-002	8 Service Support System YTU94057-52
	
9 Alignment Tape MC-1	10 INF Adjustment Lens YTU92001B
	
11 INF Adjustment Lens Holder YTU94087	12 Camera Stand YTU93079
	
13 Light box Assembly YTU93096A	14 Gray Scale Chart YTU94133A
	
15 Color Bar Chart YTU94133C	
	

Table 3-1-1

1. **Torque driver**
   Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.
2. **Bit**
   This bit is slightly longer than those set in conventional torque drivers.
3. **Tweezers**
   To be used for removing and installing parts and wires.
4. **Chip IC replacement jig**
   To be used for adjustment of the camera system.
5. **Jig connector cable**
   Connected to CN105 of the main board and used for electrical adjustment, etc.
6. **Communication Cable**
   Connect the Communication cable between the PC cable and Jig connector cable when performing a PC adjustment.
7. **PC cable**
   To be used to connect the VideoMovie and a personal computer with each other when a personal computer is used for adjustment.
8. **Service support system**
   To be used for adjustment with a personal computer.
9. **Alignment tape**
   To be used for check and adjustment of interchangeability of the mechanism.
10. **INF adjustment lens**
   To be used for adjustment of the camera system.
11. **INF adjustment lens holder**
   To be used together with the camera stand for operating the VideoMovie in the stripped-down condition such as the status without the exterior parts or for using commodities that are not yet conformable to the interchangeable ring.
12. **Camera stand**
   To be used together with the INF adjustment lens holder.
13. **Light box assembly**
   To be used for adjustment of the camera system.
14. **Gray scale chart (for Light box assembly)**
   To be used for adjustment of the camera system.
15. **Color bar chart (for Light box assembly)**
   To be used for adjustment of the camera system.

3.2 SETUP

1. Setup for electrical adjustment with personal computer.

NOTE: *Remove one screw (1) first and the cover (JIG) next.*

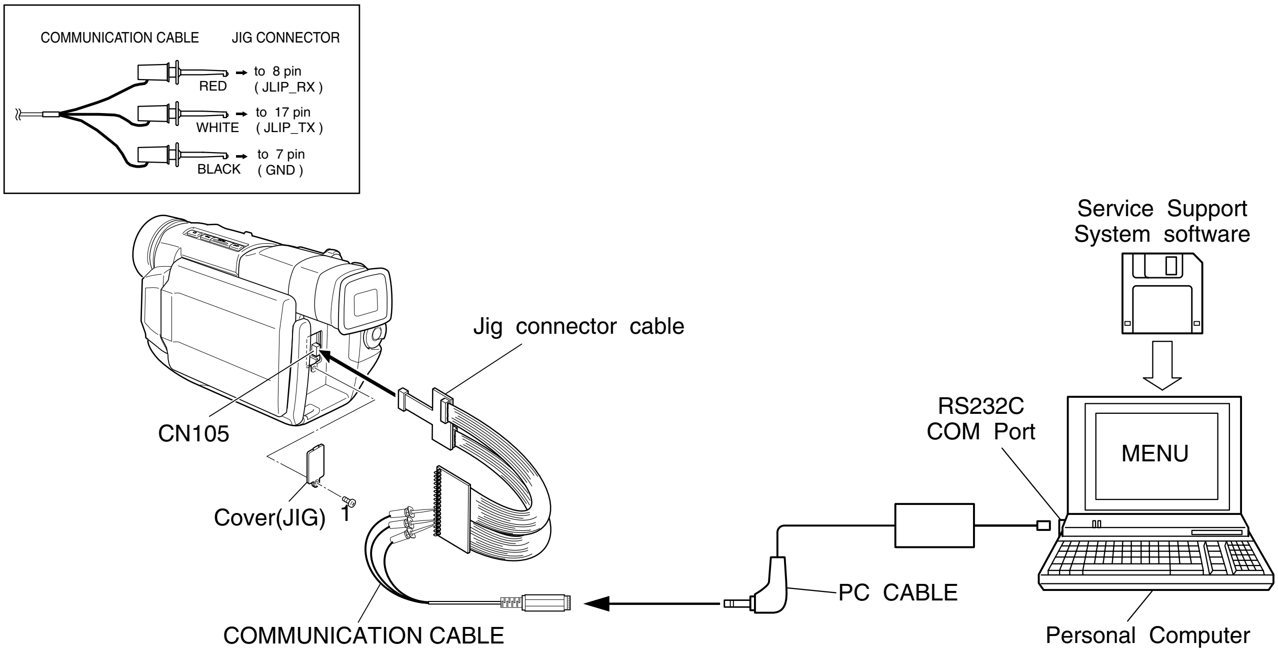

COMMUNICATION CABLE
JIG CONNECTOR
RED
to 8 pin
(JLIP_RX)
WHITE
to 17 pin
(JLIP_TX)
BLACK
to 7 pin
(GND)
Service Support System software
Jig connector cable
CN105
Cover(JIG)
1
RS232C COM Port
MENU
PC CABLE
COMMUNICATION CABLE
Personal Computer

Fig. 3-2-1 Connection for Service support system

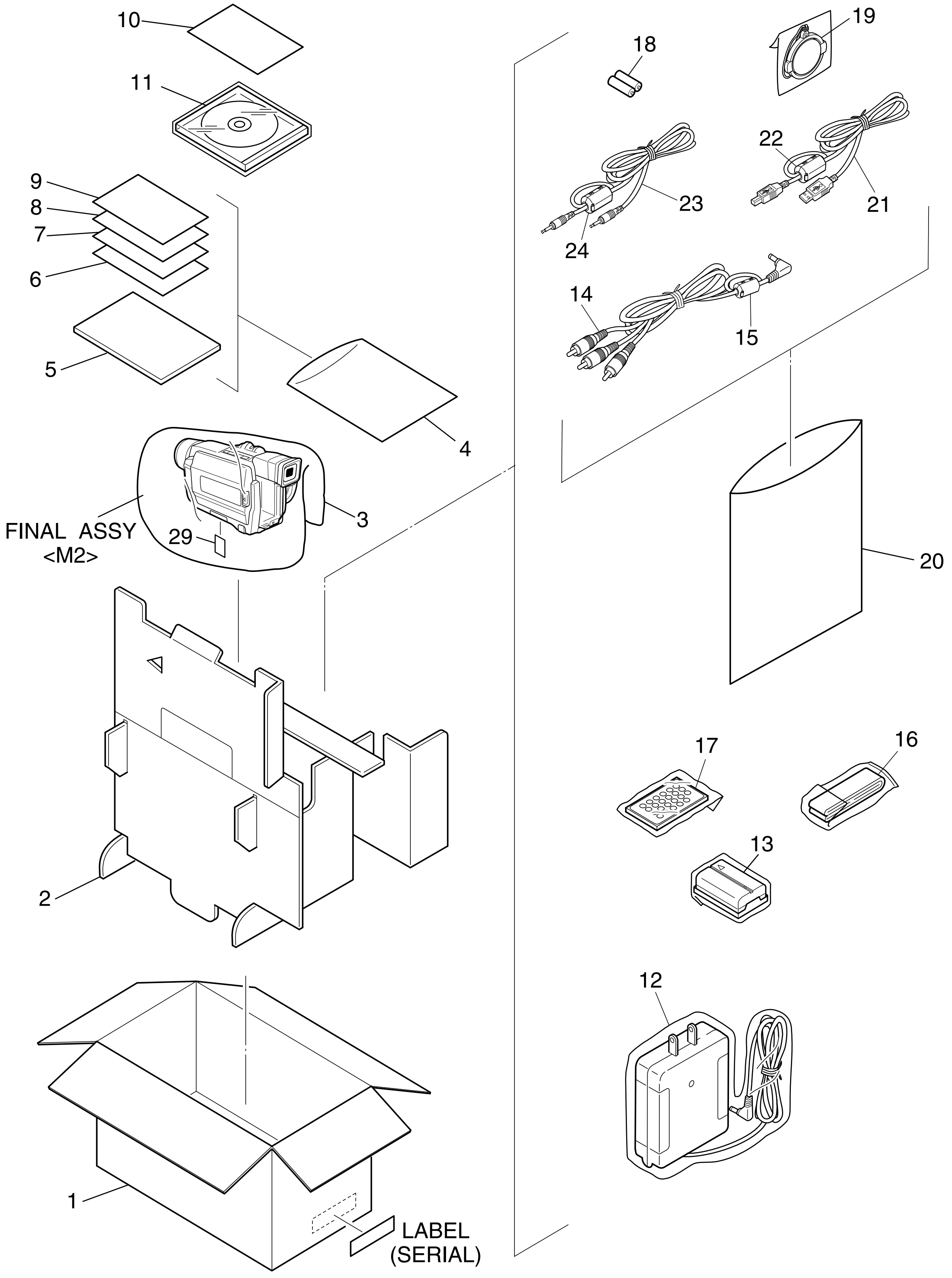
SECTION 5
PARTS LIST

SAFETY PRECAUTION

Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.

5.1 PACKING AND ACCESSORY ASSEMBLY <M1>

The instruction manual to be provided with this product will differ according to the destination.



* * *

PACKING AND ACCESSORY ASSEMBLY <M1>

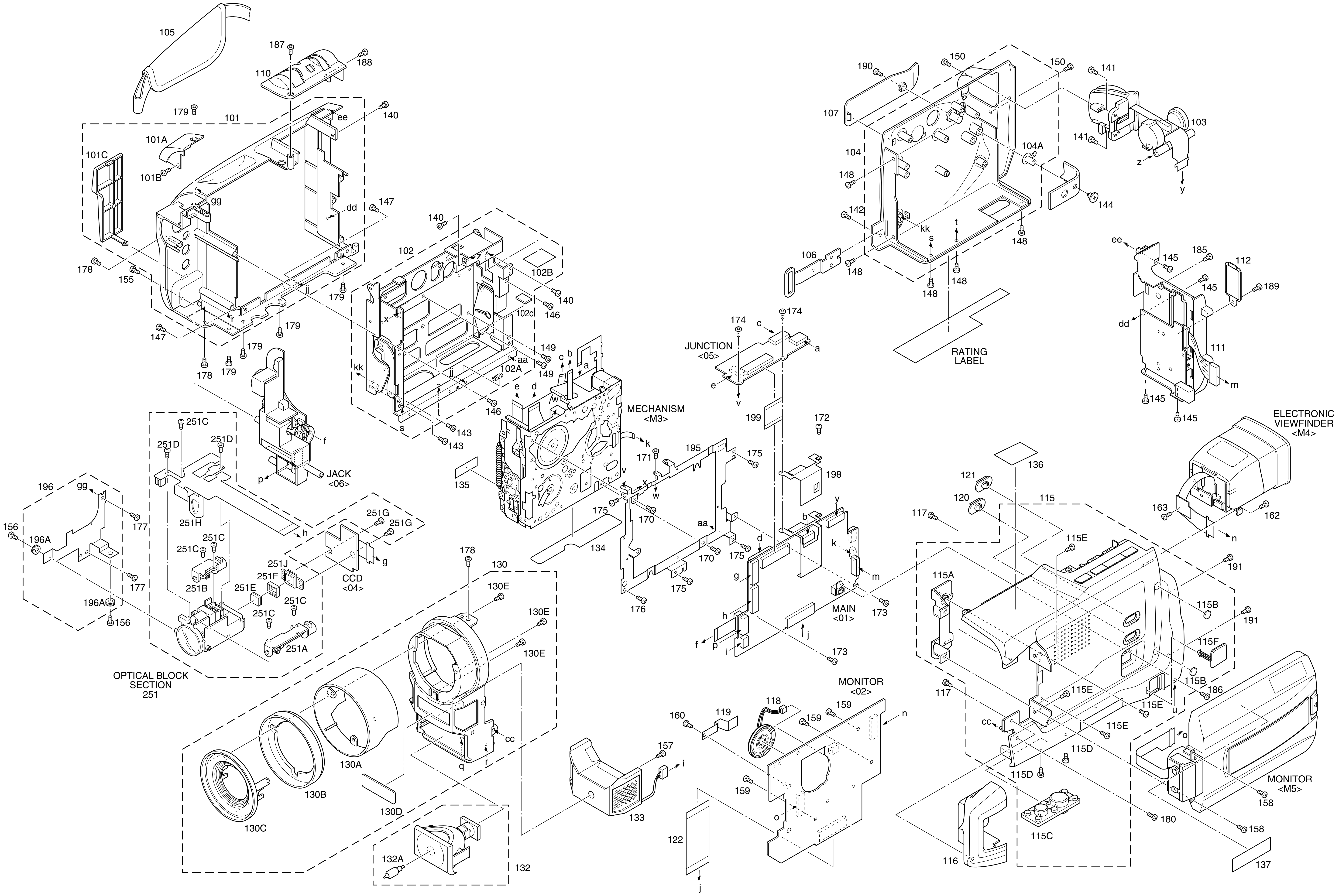
# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	1	LY30023-008A	POLY BAG
	2	LY32095-005A	PACKING CASE,C,D
		LY32095-006A	PACKING CASE,B
		LY32095-009A	PACKING CASE,A
	3	LY32096-001A	CUSHION
	4	QPA02003006	POLY BAG
⚠	5	LYT0711-001A	INST.BOOK(EN),C
⚠		LYT0711-002A	INST.BOOK(FR),C
⚠		LYT0711-003A	INST.BOOK(SP),C
⚠		LYT0722-001A	INST.BOOK(EN),A,B,D
⚠		LYT0722-002A	INST.BOOK(FR),A,B,D
⚠		LYT0722-003A	INST.BOOK(SP),A,B,D
⚠	6	LYT0766-001A	INST.BOOK(SOFT.3LANG)
	7	LYT0378-003A	SHEET(AGREMENT)
	8	YU10350	Q.CARD(JCA)
	9	BT-51005-4	WARRANTY INF.
	10	BT-51020-2	REGIST.CARD
	11	LY32210-003A	CD ROM
⚠	12	LY20739-001A	AC ADAPTER,AP-V10U
⚠	13	LY31587-001A	BATTERY PACK,BN-V408U
	14	QAM0211-001	CABLE ASSY,AUDIO/VIDEO CABLE
	15	QQR0918-002	CORE FILTER
	16	LY20186-001A	SHOULDER STRAP
	17	LY20543-002A	REMOTE CONTROL UNIT,RM-V716U,B,C,D
		LY42129-001A	REMOTE CONTROL UNIT,RM-V715U,A
	18	–	BATTERY,AAA(R03),X2
	19	LY42182-001A	LENS CAP
	20	QPGA017-03005	POLY BAG
	21	QAM0324-001	USB CABLE
	22	QQR0918-002	CORE FILTER
	23	PEAC0428-150	CABLE ASSY,EDITING CABL,B,C,D
	24	QQR0491-002	CORE FILTER,B,C,D
	29	QAM0262-002	MEMORY CARD,A,C
		QAM0321-002	MEMORY CARD,B,D

- **INSTRUCTIONS**

EN .... ENGLISH
FR .... FRENCH
SP .... SPANISH

MODEL	MARK
GR-DVL510U	A
GR-DVL815U	B
GR-DVL817U	C
GR-DVL915U	D

5.2 FINAL ASSEMBLY <M2>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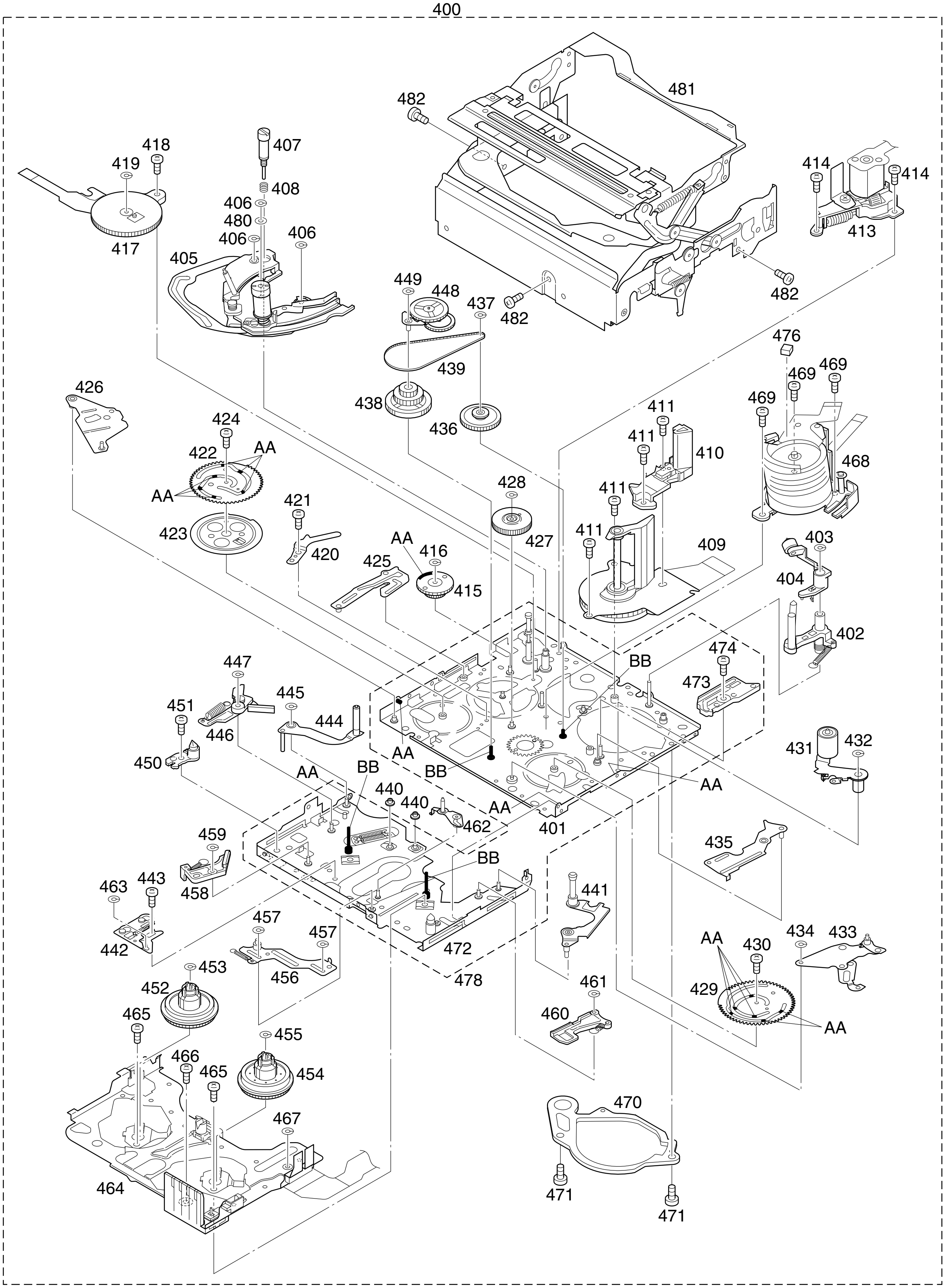
FINAL ASSEMBLY <M2>

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION
101	LY20706-002A	LOWER CASE ASSY,D
	LY20706-003B	LOWER CASE ASSY,A,B
	LY20706-003C	LOWER CASE ASSY,C
101A	LY32098-001A	WINDOW(IR)
101B	LY30018-063A	SPECIAL SCREW
101C	LY32099-001B	COVER(JACK)
102	LY20697-001A	ARM ASSY
102A	LY30001-023A	TENSION SPRING
102B	LY30029-0C7A	SPACER(A)
102C	LY30029-0E9A	SPACER(A)
103	LY20693-001A	ZOOM UNIT
104	LY20704-001A	CASS.COVER ASSY
104A	LY40592-001A	CAP(GRIP BELT)
105	LY20575-004B	GRIP BELT
106	LY42891-001A	HOOK(GRIP)
107	LY32092-005A	COVER(AJUST),D
	LY32092-006A	COVER(AJUST),C
	LY32092-010A	COVER(AJUST),A
	LY32092-011A	COVER(AJUST),B
110	LY32093-001A	COVER(ZOOM)ASSY
111	LY20725-001A	REAR UNIT
112	LY41691-001A	COVER(JIG)
115	LY20717-002B	UPPER CASE3/3.5 ASSY,B,C,D
	LY20707-004B	UPPER CASE(2.5) ASSY,A
115A	LY32101-001A	BRACKET
115B	LY40664-001A	SPACER,X2
115C	LY31019-001A	BASE
115D	LY30018-084A	SPECIAL SCREW,X2
115E	LY30018-0A8A	SPECIAL SCREW,X4
115F	LY42866-001A	CAP(DC JACK)
116	LY32106-001A	COVER(HINGE)
117	LY30018-084A	SPECIAL SCREW,X2
118	QAS0048-001	SPEAKER,A,B,D
	QAS0071-001	SPEAKER,C
119	LY42167-001A	PLATE(SPK)
120	LY42919-001A	KNOB(SLIDE)
121	LY42919-002A	KNOB(SLIDE)
122	QUQ105-5007AA	FFC WIRE,MAIN CN101-MONI CN761
⚠ 130	LY20711-001A	FRONT COVER ASSY
130A	LY32111-001A	HOOD
130B	LY32112-001A	RING
130C	LY32113-001A	HOOD(SCREW)
130D	LY42953-001A	MARK
130E	LY30018-052A	SPECIAL SCREW,X3
132	LY31617-002A	DC LIGHT ASSY
132A	YQ44266	LAMP
133	LY32114-001A	MICROPHONE
134	LY40698-002A	LABEL(HOUSING)
135	LY40699-002A	LABEL(PUSH)
136	LY43093-012A	STICKER(TOP)
137	LY43094-003A	STICKER(SIDE)
140	LY30018-084A	SPECIAL SCREW,X3
141	LY30018-096A	SPECIAL SCREW,X2
142	LY30018-038A	SPECIAL SCREW
143	LY30018-084A	SPECIAL SCREW,X2
144	LY30018-0D1A	SPECIAL SCREW
145	LY30018-084A	SPECIAL SCREW,X4
146	LY30018-084A	SPECIAL SCREW,X2
147	LY30018-038A	SPECIAL SCREW,X2
148	LY30018-038A	SPECIAL SCREW,X5
149	LY30018-084A	SPECIAL SCREW,X2
150	LY30018-084A	SPECIAL SCREW,X2
155	LY30018-084A	SPECIAL SCREW
156	LY30019-029B	SPECIAL SCREW,X2
157	LY30018-023A	SPECIAL SCREW
158	LY30018-090A	SPECIAL SCREW,X2
159	LY30018-023A	SPECIAL SCREW,X3
160	LY30018-006B	SPECIAL SCREW
162	LY30018-063A	SPECIAL SCREW
163	LY30018-064A	SPECIAL SCREW
170	LY30019-026A	SPECIAL SCREW,X2
171	YQ43893-4	MINI SCREW
172	YQ43893-4	MINI SCREW
173	LY30019-033A	SPECIAL SCREW,X2
174	QYSPSPT1730Z	SCREW,X2
175	LY30018-066A	SPECIAL SCREW,X4
176	LY30018-084A	SPECIAL SCREW
177	LY30018-084A	SPECIAL SCREW,X2
178	LY30018-084A	SPECIAL SCREW,X3
179	LY30018-084A	SPECIAL SCREW,X5
180	LY30018-092A	SPECIAL SCREW
185	LY30018-065A	SPECIAL SCREW
186	LY30018-006B	SPECIAL SCREW
187	LY30018-092A	SPECIAL SCREW
188	LY30018-065A	SPECIAL SCREW
189	LY30018-037A	SPECIAL SCREW
190	LY30018-037A	SPECIAL SCREW
191	LY30018-084A	SPECIAL SCREW,X2
195	LY20696-001A	BRACKET(MECHA)
196	LY42846-001A	BKT(OP) ASSY
196A	LY42796-001A	BUSH,X2
198	LY32081-001A	SHIELD PLATE
199	WJT0044-001A	E-CARD WIRE,MAIN CN113-JUNC CN571

– OPTICAL BLOCK SECTION –

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION
251	J7A-133A	OPTICAL BLOCK ASSY
251A	LY30723-001B	ZOOM MOTOR
251B	LY30724-001B	FOCUS MOTOR
251C	LY30727-002A	SCREW,X5
251D	LY30727-001A	SCREW,X2
251E	LY42936-001A	OPTICAL LPF
251F	LY31639-001A	SPACER RUBBER
251G	QYSPSGU1750Z	SCREW,X2
251H	LY32160-001A	IRIS MOTOR
251J	YS40168E	CCD BASE ASSY

5.3 MECHANISM ASSEMBLY <M3>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Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-P	AA
Oil	YTU94027	BB

NOTE: The section marked in **AA** and **BB** indicate lubrication and greasing areas.

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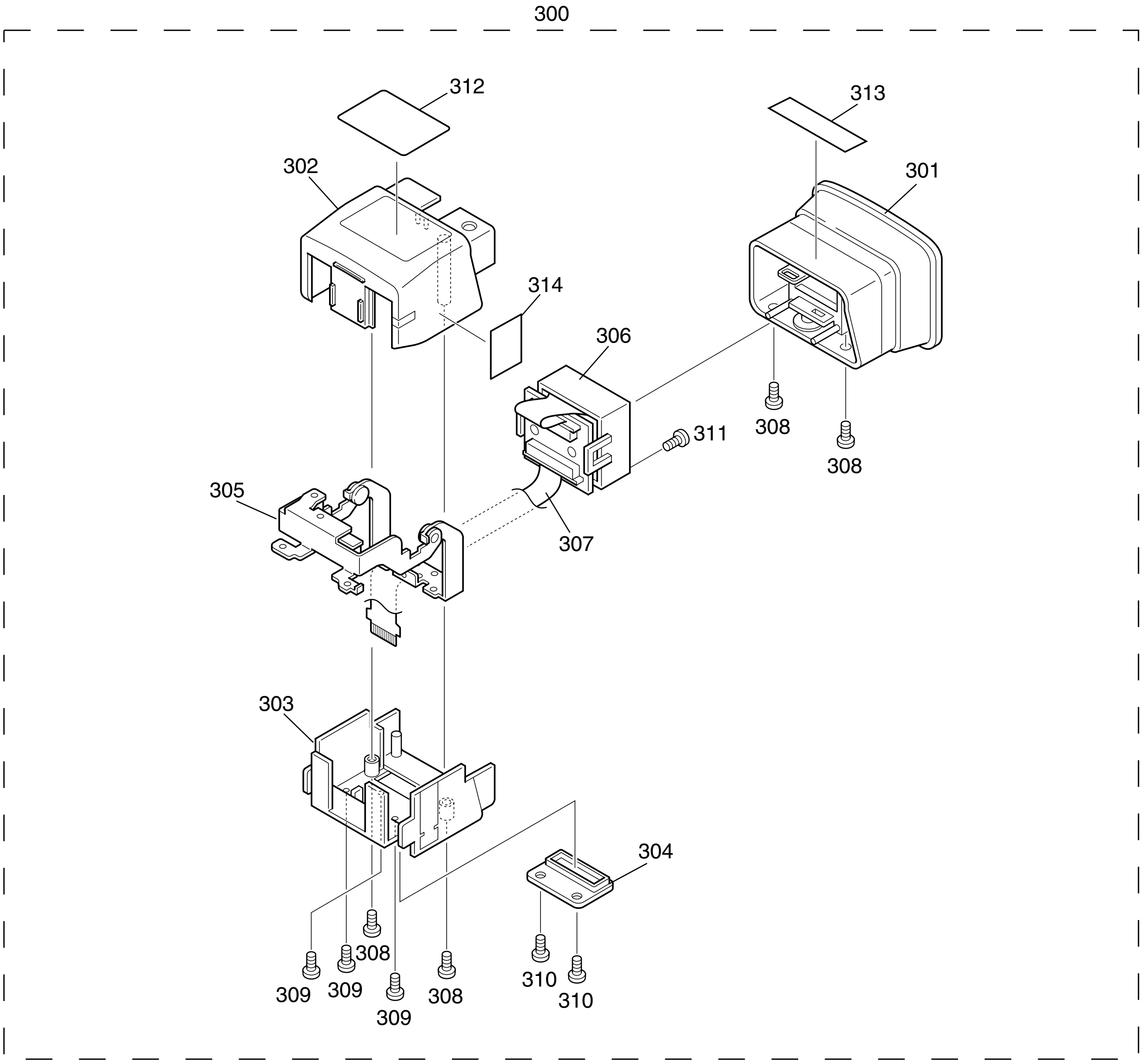
MECHANISM ASSEMBLY <M3>

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION
400	YMA0025H	MECHA(A)ASSY
401	LY10077-001M	MAIN DECK ASSY
402	LY30436-001G	SLANT P.ARM ASSY
403	YQ44246	SLIT WASHER
404	LY30438-001B	CLEANER ARM ASSY
405	LY10080-001V	RAIL ASSY
406	YQ44246	SLIT WASHER,X3
407	LY40353-001D	GUIDE ROLLER(S)ASSY
408	LY30002-006C	COMPRES. SPRING
409	QAR0026-002	CAPSTAN MOTOR
410	LY30504-001C	CATCHER(T)ASSY
411	YQ43893	MINI SCREW,X4
413	LY30448-001G	MOTOR BKT ASSY
414	YQ43893	MINI SCREW,X2
415	LY30449-001C	WORM WHEEL
416	YQ44246	SLIT WASHER
417	LY40496-001C	ROTARY ENCODER
418	YQ43893	MINI SCREW
419	YQ44246	SLIT WASHER
420	LY40614-001B	GEAR HOLDER
421	YQ43893-6	MINI SCREW
422	LY30450-001C	MAIN CAM
423	LY30840-001A	BRAKE CTL PLATE
424	YQ43893	MINI SCREW
425	LY40373-001C	TC LEVER ASSY
426	LY30452-001G	SLIDE LEVER ASSY
427	LY30454-001A	CONNECT GEAR
428	YQ44246	SLIT WASHER
429	LY30455-001B	SUB CAM
430	YQ43893	MINI SCREW
431	LY30456-001F	PINCHROLLER ARM ASSY
432	YQ44246	SLIT WASHER
433	LY30459-001A	CHARGE ARM ASSY
434	YQ44246	SLIT WASHER
435	LY40387-001D	BC LEVER ASSY
436	LY40389-001D	R.D.PULLEY ASSY
437	YQ44246-2	SLIT WASHER
438	LY40391-002A	CENTER GEAR ASSY
439	LY40396-001A	TIMING BELT
440	LY40413-001A	COLLAR,X2
441	LY30468-001E	GUIDE ARM ASSY
442	LY30618-001C	SLIDE GUIDE PLATE ASSY
443	YQ43893-2	MINI SCREW
444	LY40420-001J	TENSION ARM ASSY
445	YQ44246	SLIT WASHER
446	LY30471-001D	PAD ARM ASSY
447	YQ44246	SLIT WASHER
448	LY40432-001H	IDLER ARM ASSY
449	YQ44246-2	SLIT WASHER
450	LY30476-001A	GUIDE PIN(S)
451	YQ43893	MINI SCREW
452	LY40441-001B	REEL DISK(SUPPLY)ASSY
453	YQ44246	SLIT WASHER
454	LY40443-001B	REEL DISK(TAKE-UP)ASSY
455	YQ44246	SLIT WASHER
456	LY30477-001F	CTL PLATE ASSY
457	YQ44246	SLIT WASHER,X2
458	LY40444-001E	LOADING BRAKE ASSY
459	YQ44246	SLIT WASHER
460	LY40452-001C	SUB BRAKE ASSY
461	YQ44246	SLIT WASHER
462	LY30479-001E	RELEASE GUIDE ASSY
463	YQ44246	SLIT WASHER
464	LY20146-001H	REEL COVER ASSY
465	YQ43893-4	MINI SCREW,X2
466	YQ43893	MINI SCREW
467	YQ44246	SLIT WASHER
468	YDV2086K	DRUM ASSY
469	YQ43893	MINI SCREW,X3
470	LY20138-001D	PWB HOLDER
471	YQ43893	MINI SCREW,X2
472	LY10082-001L	SLIDE DECK ASSY
473	LY30462-001B	LOADING GUIDE
474	YQ43893	MINI SCREW
476	LY30016-0M1A	SPACER-A
478	LY30496-001W	DECK ASSY
480	LY41573-001A	WASHER
481	LY30483-001Q	CASSETTE HOUSING ASSY
482	YQ43893-4	MINI SCREW,X3

5.4 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-DVL815U/915U]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# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION

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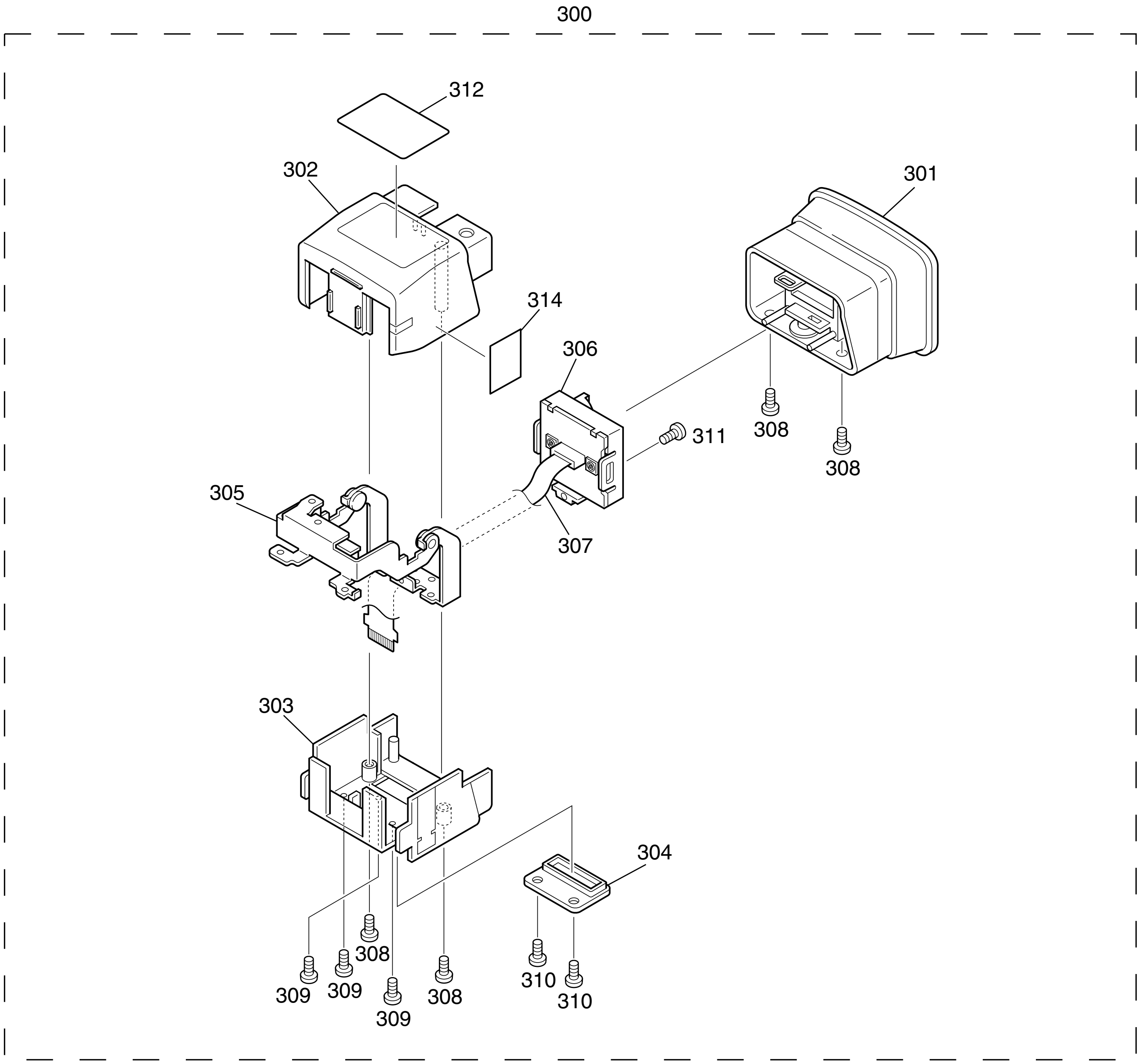
ELECTRONIC VIEWFINDER ASSEMBLY <M4>

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION
300	LY20712-001A	VF ASSY
301	PTY20712-001	EYE PIECE ASSY
302	PTY20712-011	TOP CASE SUB ASSY
303	PTY20712-021	BOTTOM CASE
304	PTY20712-022	CAP(VF)
305	PTY20712-031	HINGE ASSY
306	PTY20712-041	LCD ASSY
307	QAL0287-001	FPC
308	LY30018-063A	SPECIAL SCREW,X4
309	LY30018-055A	SPECIAL SCREW,X3
310	LY30018-035A	SPECIAL SCREW,X2
311	PTY20712-051	SCREW
312	LY41701-002A	SHEET(CAUTION)1
313	LY40074-001A	LABEL COLOR
314	LY43041-002A	LABEL(VF)

5.4 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-DVL510U/817U]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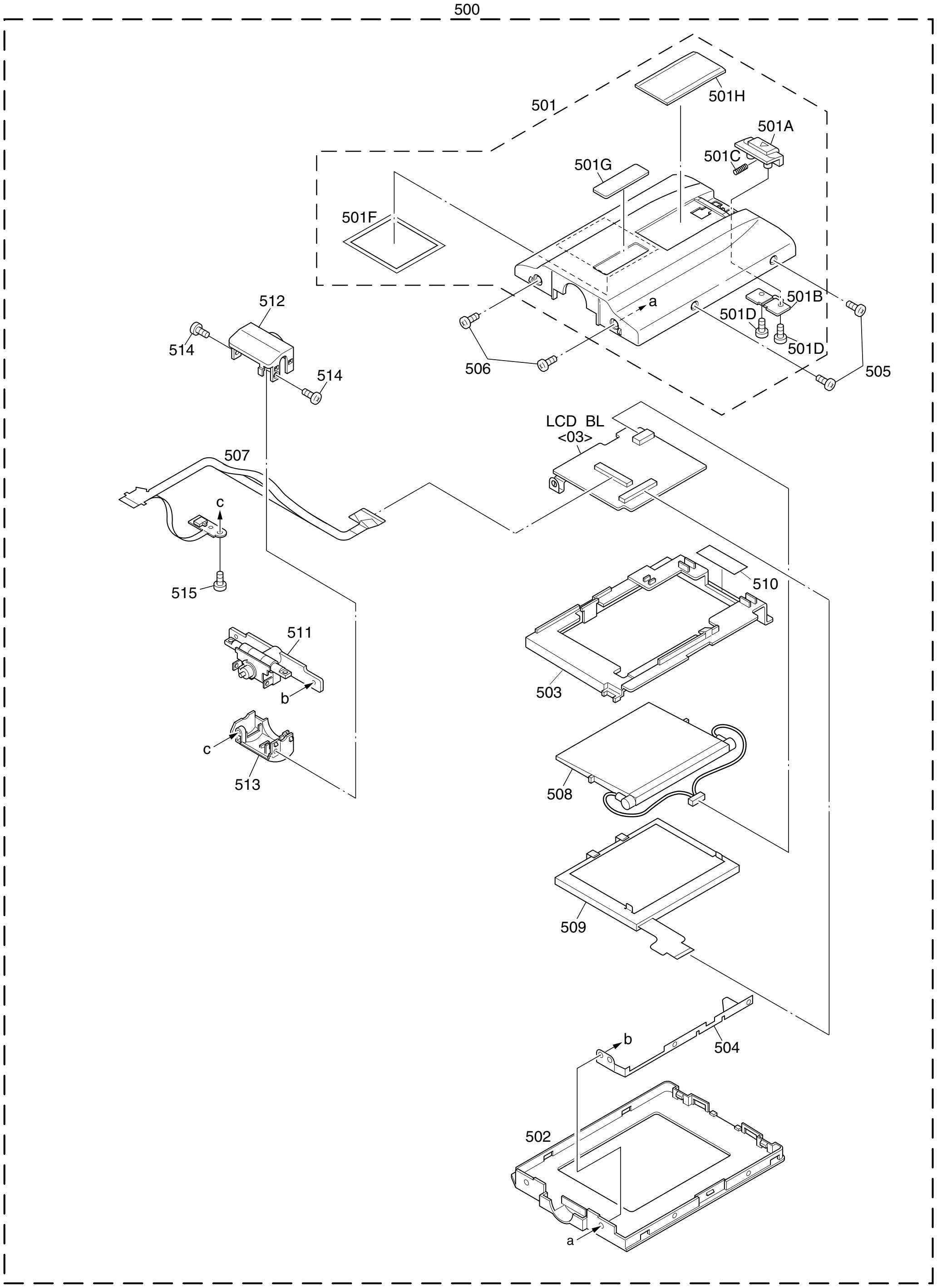
ELECTRONIC VIEWFINDER ASSEMBLY <M4>

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION
300	LY20744-001A	VF UNIT,A
	LY20744-001B	VF UNIT,C
301	PTY20744-001	EYE PIECE ASSY
302	PTY20712-011	TOP CASE SUB ASSY
303	PTY20712-021	BOTTOM CASE
304	PTY20712-022	CAP(VF)
305	PTY20712-031	HINGE ASSY
306	PTY20744-041	LCD ASSY
307	QAL0288-001	FPC
308	LY30018-063A	SPECIAL SCREW,X4
309	LY30018-055A	SPECIAL SCREW,X3
310	LY30018-035A	SPECIAL SCREW,X2
311	PTY20744-051	SCREW
312	LY41701-002A	SHEET(CAUTION)1
314	LY43041-002A	LABEL(VF)

5.5 MONITOR ASSEMBLY <M5> [GR-DVL510U]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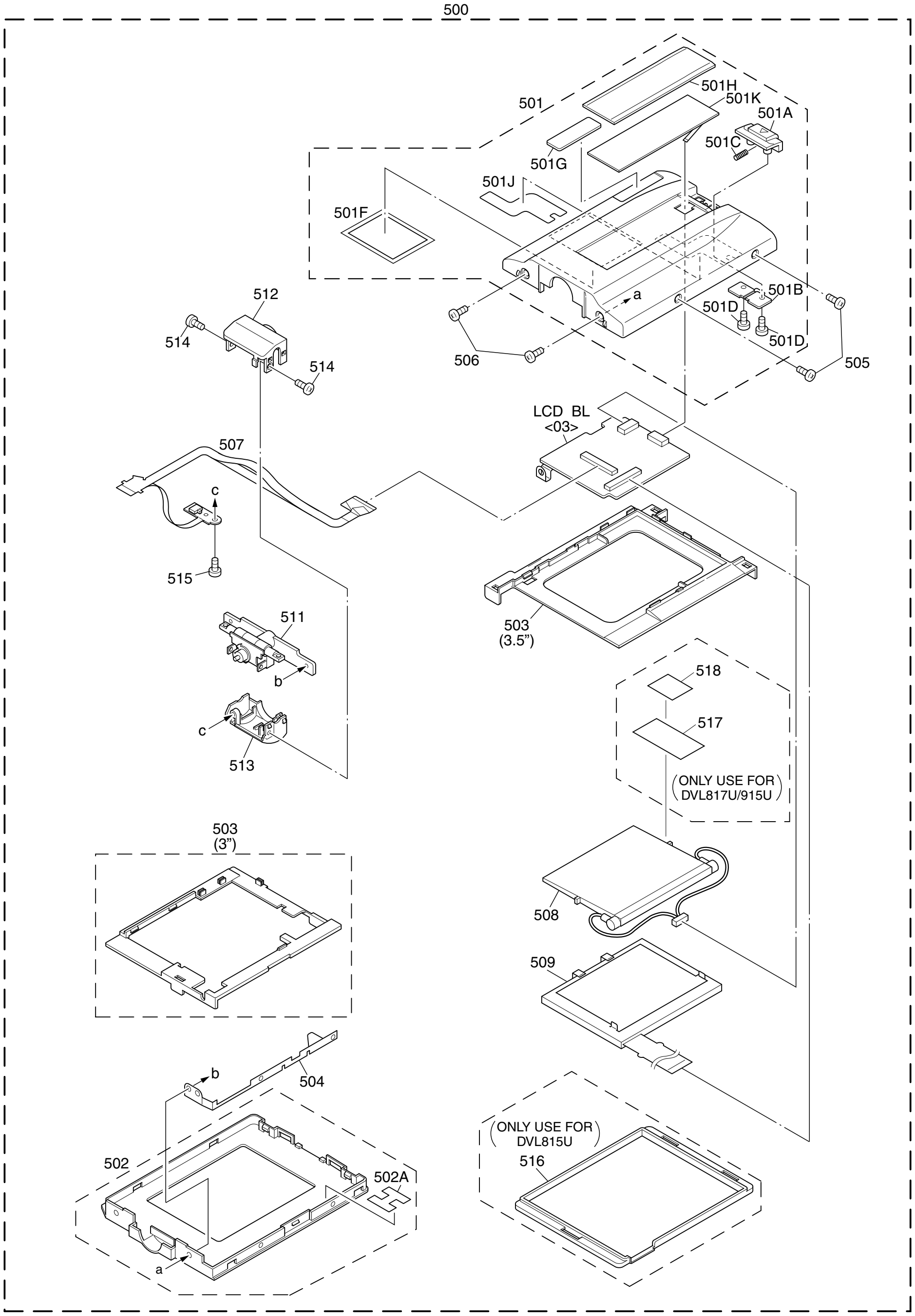
MONITOR ASSEMBLY <M5>

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION
⚠	500	LYH20246-010A	MONITOR ASSY
⚠	501	LY20702-003B	MONITOR COVER(2.5)ASSY
	501A	LY31620-001A	KNOB(LOCK 1)
	501B	LY42180-001A	KNOB(LOCK 2)
	501C	LY30002-044A	COMPRES. SPRING
	501D	LY30018-084A	SPECIAL SCREW,X2
	501E	LY42368-001A	SHEET(MON)
	501F	LY40559-001A	SHIELD SHEET
	501G	LY42883-001A	MARK
	501H	LY32087-002B	WINDOW

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	502	LY10264-001A	MONITOR CASE(2.5)
	503	LY20674-001A	HOLDER(2.45)
	504	LY31622-001A	BRACKET(EARTH)
	505	QYSPSPT1730R	SCREW,X2
	506	QYSLSP2040D	SCREW,X2
	507	LY31743-001A	MONITOR FPC ASSY
	508	QLL0093-001	BACK LIGHT
	509	QLD0154-001	LCD MODULE
	510	LY30029-063A	SPACER(A)
	511	LY32079-001A	HINGE ASSY
	512	LY32088-001A	HINGE COVER(1)
	513	LY32089-001A	HINGE COVER(2)
	514	LY30018-058A	SPECIAL SCREW,X2
	515	LY30018-023A	SPECIAL SCREW

5.5 MONITOR ASSEMBLY <M5> [GR-DVL815U/817U/915U]



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#	⚠	REF No.	PART No.	PART NAME, DESCRIPTION

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MONITOR ASSEMBLY <M5>

#	⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	⚠	500	LYH20246-005A	MONITOR ASSY,C,D
	⚠		LYH20246-006A	MONITOR ASSY,B
	⚠	501	LY20721-002B	MONITOR COVER(3.5)ASSY
		501A	LY31620-001A	KNOB(LOCK 1)
		501B	LY42180-001A	KNOB(LOCK 2)
		501C	LY30002-044A	COMPRES. SPRING
		501D	LY30018-084A	SPECIAL SCREW,X2
		501F	LY40559-001A	SHIELD SHEET
		501G	LY42883-001A	MARK
		501H	LY32121-002B	WINDOW
		501J	LY42386-001A	EARTH MON
		501K	LY42193-001A	EL(WINDOW)
		502	LY20598-001A	MONITOR CASE ASSY,B
			LY20598-002A	MONITOR CASE ASSY,C,D
		502A	LY42388-001A	EARTH MON(2)

#	⚠	REF No.	PART No.	PART NAME, DESCRIPTION
		503	LY20567-001A	HOLDER(3PWB),B
			LY20568-001A	HOLDER(3.5PWB),C,D
		504	LY31622-001A	BRACKET(EARTH)
		505	QYSPSPT1730R	SCREW,X2
		506	QYSLSP2040D	SCREW,X2
		507	LY31743-001A	MONITOR FPC ASSY
		508	QLL0081-001	BACK LIGHT,C,D
			QLL0094-001	BACK LIGHT,B
		509	QLD0096-002	LCD MODULE,C,D
			QLD0118-001	LCD MODULE,B
		511	LY32079-001A	HINGE ASSY
		512	LY32088-001A	HINGE COVER(1)
		513	LY32089-001A	HINGE COVER(2)
		514	LY30018-058A	SPECIAL SCREW,X2
		515	LY30018-023A	SPECIAL SCREW
		516	LY20566-001B	HOLDER(3LCD),B
		517	LY30029-0A5A	SPACER(A),C,D
		518	PU59915-105	#500SPACER0.01,C,D

5.6 ELECTRICAL PARTS LIST

MODEL	MARK	MODEL	MARK
GR-DVL510U	A	GR-DVL817U	C
GR-DVL815U	B	GR-DVL915U	D

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MAIN BOARD ASSEMBLY <01>

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION
PW	YB10317A-02	MAIN BOARD ASSY,D
	YB10317B-03	MAIN BOARD ASSY,A,B,C
IC1001	UPD703039F1-A02	IC
	or UPD70F3040F1A02	IC
IC1002	RS5C314	IC
IC1003	AT25160N-10SC-X	IC
	or X25170S8I-2.5-X	IC
	or 25LC160-I/SN-X	IC
IC1004	TC75S56FU	IC
IC1005	TC7S00FU	IC
	or SN74AHC1G00K	IC
IC1006	MB90097PFV139	IC(MICRO C ROM)
IC1007	TC74VHC08FT	IC(DIGITAL)
	or SN74LV08APW	IC
IC1008	TC7W66FK	IC
IC1009	IC-PST9323U-X	IC
IC1303	TC7S32FU	IC(DIGITAL)
	or SN74AHC1G32K	IC
IC1304	TC7S02FU	IC(DIGITAL)
	or SN74AHC1G02K	IC
IC1401	YQ44881A	CSP IC ASSY
IC1403	SN74AHC2G53T	IC
IC1404	TC7W14FU	IC(DIGITAL)
	or SN74AHC2G14T	IC
IC1601	BD6630KV	IC
IC2001	AK4560AVQ	IC
IC3001	JCY0133	IC
IC3002	JCY0136	IC
IC3003	TLC2940IPW	IC
IC3004	SN74AHC1G04K	IC
IC3006	JCY0164	IC
IC3007	SN74AHC2G53T	IC
IC3501	JCY0132	IC
IC3701	BA7665FS	IC
IC3901	JCP8029	IC,D
IC3951	MM1504XN	IC,D
IC4201	HD49326BF	IC
IC4202	MM1385HN	IC
IC4301	JCY0150	IC
IC4302	TMS4C2973-28-X	IC
IC4802	TA75W01FU	IC
IC4803	TA75W01FU	IC
IC4804	UPC358G2/5/-W	IC
IC4806	TC7W00FK	IC
IC4851	UPD16879GS	IC
IC5501	JCY0117	IC
IC6001	S-80842ANNP-W	IC
IC6101	FA3698F	IC
IC8001	JCY0076B	IC
IC8002	M32000D4AFP	IC(MICRO C ROM)
	or M32000D4BFP	IC(MICRO C ROM)
IC8003	MBV400TC90PTA06	IC(MICRO C ROM),D
	MBV400TC90PTA09	IC(MICRO C ROM),A,B,C
	or MBV400TC70PTA06	IC(MICRO C ROM),D
	or MBV400TC70PTA09	IC(MICRO C ROM),A,B,C
	or 39VF400A7CEKA01	IC(MICRO C ROM),D
	or 39VF400A7CEKA04	IC(MICRO C ROM),A,B,C
	or 39VF400A9CEKA01	IC(MICRO C ROM),D
	or 39VF400A9CEKA04	IC(MICRO C ROM),A,B,C
IC8004	S-814A31AMC-W	IC
IC8006	TC7WHU04FU	IC
IC8007	TC7W32FK	IC
IC8051	TC7S32FU	IC(DIGITAL)
IC8052	SN74AHC2G53T	IC
IC8401	ML60851CLB	IC
IC8402	S-80842ANNP-W	IC
IC8403	S-814A33AMC-W	IC
Q1001	DTC124EE	TRANSISTOR
Q1002	2SC4617/RS/-X	TRANSISTOR
Q1003	DTC143EE	TRANSISTOR
Q1004	DTA114EE	TRANSISTOR
	or PDTA114EE	TRANSISTOR
	or RN2102	TRANSISTOR
Q1005	DTC144EE	TRANSISTOR
	or PDTC144EE	TRANSISTOR
	or RN1104	TRANSISTOR
	or UN9213J	TRANSISTOR
Q1006	DTA114EE	TRANSISTOR
	or PDTA114EE	TRANSISTOR
	or RN2102	TRANSISTOR
Q1007	DTC144EE	TRANSISTOR
	or PDTC144EE	TRANSISTOR
	or RN1104	TRANSISTOR
	or UN9213J	TRANSISTOR
Q1301	2SC4617/RS/-X	TRANSISTOR
Q1401	DTA114EE	TRANSISTOR
	or RN2102	TRANSISTOR
	or PDTA114EE	TRANSISTOR
Q1402	UMC3N	TRANSISTOR
Q1403	UMC3N	TRANSISTOR
Q1404	DTC144EE	TRANSISTOR
	or RN1104	TRANSISTOR
	or PDTC144EE	TRANSISTOR
	or UN9213J	TRANSISTOR
Q1601	UMC3N	TRANSISTOR
Q2001	UMX1N	PAIR TRANSISTOR
Q2002	2SC4617/RS/-X	TRANSISTOR
Q2004	2SC4617/RS/-X	TRANSISTOR
Q3701	UMT2N	PAIR TRANSISTOR
Q3702	UMZ1N	PAIR TRANSISTOR
Q3703	2SC4617/RS/-X	TRANSISTOR,D
Q3951	UMZ1N	PAIR TRANSISTOR,D
Q3952	DTC144EE	TRANSISTOR,D
	or RN1104	TRANSISTOR,D
	or UN9213J	TRANSISTOR,D
	or PDTC144EE	TRANSISTOR,D
Q3953	UMZ1N	PAIR TRANSISTOR,D
Q3954	2SC4617/RS/-X	TRANSISTOR,D
Q4301	UMT2N	PAIR TRANSISTOR
Q4302	UMT2N	PAIR TRANSISTOR
Q4801	2SC4655/BC/-X	TRANSISTOR
Q4851	2SC4617/RS/-X	TRANSISTOR
Q6001	DTC144EE	TRANSISTOR
	or PDTC144EE	TRANSISTOR
	or RN1104	TRANSISTOR
	or UN9213J	TRANSISTOR
Q6002	2SK3019	MOS FET
Q6003	2SJ347	MOS FET
Q6004	2SB1121/TU/-X	TRANSISTOR
Q6101	2SK3019	MOS FET
Q6102	2SK3019	MOS FET
Q6201	NDS352AP	MOS FET
Q6202	2SA1577/RS/-X	TRANSISTOR

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
Q6203	SSM6J07FU	MOS FET	
Q6204	CPH3304	MOS FET	
Q6205	CPH3101	TRANSISTOR	
Q6206	2SC4617/RS/-X	TRANSISTOR	
Q6207	2SD1621/TU/-X	TRANSISTOR	
Q6208	SSM6J07FU	MOS FET	
Q6210	SSM6J07FU	MOS FET	
Q6211	NDS352AP	MOS FET	
Q6212	HN1C01FU/G/-X	PAIR TRANSISTOR	
	or PUMX1	PAIR TRANSISTOR	
Q6213	2SA1577/RS/-X	TRANSISTOR	
Q6214	DTC144EE	TRANSISTOR	
	or PDTC144EE	TRANSISTOR	
	or RN1104	TRANSISTOR	
	or UN9213J	TRANSISTOR	
Q6215	HN1A01FU/G/-X	PAIR TRANSISTOR	
	or PUMT1	PAIR TRANSISTOR	
Q6216	2SC4617/RS/-X	TRANSISTOR	
Q6217	UMZ1N	PAIR TRANSISTOR	
Q6701	TPC6102	MOS FET	
Q8001	2SB1121/TU/-X	TRANSISTOR	
Q8401	DTA114EE	TRANSISTOR	
D1001	DA221	DIODE	
D1302	RB501V-40-X	SB DIODE	
D1602	DAP222	DIODE	
D1603	DAP222	DIODE	
D1604	DAP222	DIODE	
D3001	EC2C01C	VARI CAP DIODE	
D3002	EC2C01C	VARI CAP DIODE	
D3003	EC2C01C	VARI CAP DIODE	
D5501	1SS355	DIODE	
⚠ D6002	RB715F	SB DIODE	
D6201	EP10LA03	SB DIODE	
D6202	EP10LA03	SB DIODE	
D6203	EP10LA03	SB DIODE	
D6204	EP10LA03	SB DIODE	
D6205	EP10LA03	SB DIODE	
D6206	1SS383	SB DIODE	
D6207	MA8091/L/-X	ZENER DIODE	
D6701	CRS09	SB DIODE	
D6702	CRS09	SB DIODE	
D8051	RB715F	SB DIODE	
D8401	1SS355	DIODE	
R1001	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1002	NRSA6AJ-224W	MG RESISTOR	220kΩ,1/16W
R1003	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R1004	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1005	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R1006	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1007	NRSA6AJ-334W	MG RESISTOR	330kΩ,1/16W
R1008	NRSA6AJ-561W	MG RESISTOR	560Ω,1/16W
R1009	NRSA6AJ-151W	MG RESISTOR	150Ω,1/16W
R1010	NRSA6AJ-221W	MG RESISTOR	220Ω,1/16W
R1011	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1012	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1013	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1014	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1015	NRSA6AJ-474W	MG RESISTOR	470kΩ,1/16W
R1016	NRSA6AJ-474W	MG RESISTOR	470kΩ,1/16W
R1017	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1018	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1019	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R1020	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R1021	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
R1022	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R1023	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1024	NRSA6AJ-823W	MG RESISTOR	82kΩ,1/16W
R1025	NRVA6AD-623W	CMF RESISTOR	62kΩ,1/16W
R1026	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1027	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1028	NRSA6AJ-185W	MG RESISTOR	1.8MΩ,1/16W
R1029	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1030	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1031	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1032	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1033	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1034	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1035	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R1036	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R1037	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1038	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R1039	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1040	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1041	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1042	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1043	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1044	NRSA6AJ-123W	MG RESISTOR	12kΩ,1/16W
R1045	NRSA6AJ-822W	MG RESISTOR	8.2kΩ,1/16W
R1046	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1047	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1048	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1049	NRSA6AJ-393W	MG RESISTOR	39kΩ,1/16W
R1050	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
R1051	NRSA6AJ-272W	MG RESISTOR	2.7kΩ,1/16W
R1052	NRSA6AJ-183W	MG RESISTOR	18kΩ,1/16W
R1053	NRSA6AJ-154W	MG RESISTOR	150kΩ,1/16W
R1054	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1055	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1056	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R1057	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1058	NRSA6AJ-222W	MG RESISTOR	2.2kΩ,1/16W
R1059	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1061	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1062	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1080	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1302	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R1306	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R1401	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1402	NRSA6AJ-222W	MG RESISTOR	2.2kΩ,1/16W
R1403	NRSA6AJ-222W	MG RESISTOR	2.2kΩ,1/16W
R1408	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R1409	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R1410	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R1411	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1412	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R1414	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R1415	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R1416	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R1417	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1418	NRSA6AJ-221W	MG RESISTOR	220Ω,1/16W
R1419	NRSA6AJ-221W	MG RESISTOR	220Ω,1/16W
R1420	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R1422	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R1423	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R1424	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R1425	NRVA6AD-753W	CMF RESISTOR	75kΩ,1/16W
R1426	NRSA6AJ-334W	MG RESISTOR	330kΩ,1/16W
R1427	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
R1428	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R1429	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1430	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1432	NRSA6AJ-820W	MG RESISTOR	82Ω,1/16W
R1433	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1434	NRSA6AJ-683W	MG RESISTOR	68kΩ,1/16W
R1435	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1436	NRSA6AJ-683W	MG RESISTOR	68kΩ,1/16W
R1437	NRVA6AD-103W	CMF RESISTOR	10kΩ,1/16W
R1439	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R1440	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R1441	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R1442	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R1443	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1444	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1445	NRSA6AJ-101W	MG RESISTOR	100Ω,1/16W
R1601	NRSA6AJ-681W	MG RESISTOR	680Ω,1/16W
R1602	NRSA6AJ-124W	MG RESISTOR	120kΩ,1/16W
R1603	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R1604	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1605	NRV142F-R22X	CMF RESISTOR	0.22Ω,1/4W
R1606	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1608	NRSA02J-0R0X	MG RESISTOR	0Ω,1/10W
R1609	NRV142F-R33X	CMF RESISTOR	0.33Ω,1/4W
R1610	NRSA6AJ-471W	MG RESISTOR	470Ω,1/16W
R1611	NRSA6AJ-471W	MG RESISTOR	470Ω,1/16W
R1612	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R1613	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R1614	NRVA6AD-682W	CMF RESISTOR	6.8kΩ,1/16W
R1615	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1616	NRSA6AJ-391W	MG RESISTOR	390Ω,1/16W
R1617	NRSA6AJ-224W	MG RESISTOR	220kΩ,1/16W
R1618	NRSA6AJ-154W	MG RESISTOR	150kΩ,1/16W
R1619	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
R1620	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1621	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1622	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1624	NRVA6AD-123W	CMF RESISTOR	12kΩ,1/16W
R1625	NRSA6AJ-181W	MG RESISTOR	180Ω,1/16W
R1626	NRSA6AJ-181W	MG RESISTOR	180Ω,1/16W
R1628	NRVA6AD-271W	CMF RESISTOR	270Ω,1/16W
R1629	NRSA6AJ-684W	MG RESISTOR	680kΩ,1/16W
R1630	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R1631	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R1635	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R1636	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R1637	NRSA6AJ-154W	MG RESISTOR	150kΩ,1/16W
R2006	NRSA6AJ-100W	MG RESISTOR	10Ω,1/16W
R2007	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R2008	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R2009	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R2010	NRSA6AJ-273W	MG RESISTOR,D	27kΩ,1/16W
R2011	NRSA6AJ-0R0W	MG RESISTOR,A,B,C	0Ω,1/16W
	NRSA6AJ-223W	MG RESISTOR,D	22kΩ,1/16W
R2012	NRSA6AJ-273W	MG RESISTOR,D	27kΩ,1/16W
R2013	NRSA6AJ-223W	MG RESISTOR,D	22kΩ,1/16W
	NRSA6AJ-0R0W	MG RESISTOR,A,B,C	0Ω,1/16W
R2014	NRSA6AJ-820W	MG RESISTOR	82Ω,1/16W
R2015	NRSA6AJ-820W	MG RESISTOR	82Ω,1/16W
R2016	NRSA6AJ-820W	MG RESISTOR	82Ω,1/16W
R2017	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R2018	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R2019	NRSA6AJ-2R7W	MG RESISTOR	2.7Ω,1/16W
R2020	NRSA6AJ-2R7W	MG RESISTOR	2.7Ω,1/16W
R2023	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R2024	NRSA6AJ-183W	MG RESISTOR	18kΩ,1/16W
R2025	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R2026	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R2027	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R2028	NRSA6AJ-224W	MG RESISTOR	220kΩ,1/16W
R2029	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R2101	NRSA6AJ-182W	MG RESISTOR	1.8kΩ,1/16W
R2102	NRSA6AJ-182W	MG RESISTOR	1.8kΩ,1/16W
R2103	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R2104	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R2105	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R2106	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R2107	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R2108	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
R2109	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R2110	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R2111	NRSA6AJ-222W	MG RESISTOR	2.2kΩ,1/16W
R2112	NRSA6AJ-222W	MG RESISTOR	2.2kΩ,1/16W
R2113	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R2114	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R2117	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R2118	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R2119	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R2120	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R2127	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R2128	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R2129	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R2130	NRSA6AJ-332W	MG RESISTOR	3.3kΩ,1/16W
R2201	NRSA6AJ-182W	MG RESISTOR	1.8kΩ,1/16W
R2202	NRSA6AJ-182W	MG RESISTOR	1.8kΩ,1/16W
R3002	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3004	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3007	NRSA6AJ-562W	MG RESISTOR	5.6kΩ,1/16W
R3008	NRSA6AJ-222W	MG RESISTOR	2.2kΩ,1/16W
R3009	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3010	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3011	NRSA6AJ-224W	MG RESISTOR	220kΩ,1/16W
R3013	NRSA6AJ-242W	MG RESISTOR	2.4kΩ,1/16W
R3014	NRSA6AJ-392W	MG RESISTOR	3.9kΩ,1/16W
R3015	NRSA6AJ-392W	MG RESISTOR	3.9kΩ,1/16W
R3016	NRSA6AD-560W	MG RESISTOR	56Ω,1/16W
R3017	NRSA6AD-560W	MG RESISTOR	56Ω,1/16W
R3018	NRSA6AD-560W	MG RESISTOR	56Ω,1/16W
R3019	NRSA6AD-560W	MG RESISTOR	56Ω,1/16W
R3020	NRSA6AD-512W	MG RESISTOR	5.1kΩ,1/16W
R3021	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R3022	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R3023	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R3024	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R3027	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3029	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3030	NRSA6AJ-224W	MG RESISTOR	220kΩ,1/16W
R3031	NRSA6AJ-224W	MG RESISTOR	220kΩ,1/16W
R3033	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R3034	NRSA6AJ-222W	MG RESISTOR	2.2kΩ,1/16W
R3041	NRSA6AJ-561W	MG RESISTOR	560Ω,1/16W
R3042	NRSA6AJ-561W	MG RESISTOR	560Ω,1/16W
R3043	NRSA6AJ-561W	MG RESISTOR	560Ω,1/16W
R3044	NRSA6AJ-392W	MG RESISTOR	3.9kΩ,1/16W
R3046	NRSA6AD-222W	MG RESISTOR	2.2kΩ,1/16W
R3050	NRSA6AJ-101W	MG RESISTOR	100Ω,1/16W

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
R3052	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3053	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3054	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3055	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3501	NRSA6AJ-471W	MG RESISTOR	470Ω,1/16W
R3502	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R3503	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R3504	NRSA6AD-241W	MG RESISTOR	240Ω,1/16W
R3505	NRSA6AD-241W	MG RESISTOR	240Ω,1/16W
R3506	NRSA6AD-241W	MG RESISTOR	240Ω,1/16W
R3507	NRSA6AD-241W	MG RESISTOR	240Ω,1/16W
R3508	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
R3521	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R3522	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R3701	NRSA6AD-241W	MG RESISTOR	240Ω,1/16W
R3702	NRSA6AD-241W	MG RESISTOR	240Ω,1/16W
R3703	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R3704	NRSA6AJ-0R0W	MG RESISTOR,A,B,C	0Ω,1/16W
R3705	NRSA6AJ-0R0W	MG RESISTOR,A,B,C	0Ω,1/16W
R3706	NRSA6AD-221W	MG RESISTOR	220Ω,1/16W
R3707	NRSA6AD-221W	MG RESISTOR	220Ω,1/16W
R3708	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R3709	NRSA6AJ-104W	MG RESISTOR,D	100kΩ,1/16W
R3710	NRSA6AJ-104W	MG RESISTOR,D	100kΩ,1/16W
R3711	NRSA6AD-680W	MG RESISTOR	68Ω,1/16W
R3712	NRSA6AD-680W	MG RESISTOR	68Ω,1/16W
R3713	NRSA6AD-680W	MG RESISTOR	68Ω,1/16W
R3714	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3715	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3716	NRSA6AJ-105W	MG RESISTOR	1MΩ,1/16W
R3717	NRSA6AJ-823W	MG RESISTOR	82kΩ,1/16W
R3718	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R3719	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R3721	NRSA6AJ-101W	MG RESISTOR,D	100Ω,1/16W
R3722	NRSA6AJ-472W	MG RESISTOR,D	4.7kΩ,1/16W
R3723	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R3724	NRSA6AJ-392W	MG RESISTOR,A,B,C	3.9kΩ,1/16W
R3901	NRSA6AD-681W	MG RESISTOR,D	680Ω,1/16W
R3904	NRSA6AD-821W	MG RESISTOR,D	820Ω,1/16W
R3911	NRSA6AJ-0R0W	MG RESISTOR,D	0Ω,1/16W
R3951	NRSA6AD-561W	MG RESISTOR,D	560Ω,1/16W
R3953	NRSA6AD-152W	MG RESISTOR,D	1.5kΩ,1/16W
R3954	NRSA6AJ-222W	MG RESISTOR,D	2.2kΩ,1/16W
R3955	NRSA6AJ-102W	MG RESISTOR,D	1kΩ,1/16W
R3956	NRSA6AJ-474W	MG RESISTOR,D	470kΩ,1/16W
R3961	NRSA6AD-561W	MG RESISTOR,D	560Ω,1/16W
R3962	NRSA6AJ-822W	MG RESISTOR,D	8.2kΩ,1/16W
R3963	NRSA6AD-182W	MG RESISTOR,D	1.8kΩ,1/16W
R3964	NRSA6AJ-183W	MG RESISTOR,D	18kΩ,1/16W
R3965	NRSA6AJ-183W	MG RESISTOR,D	18kΩ,1/16W
R3966	NRSA6AJ-681W	MG RESISTOR,D	680Ω,1/16W
R3967	NRSA6AJ-821W	MG RESISTOR,D	820Ω,1/16W
R3968	NRSA6AJ-821W	MG RESISTOR,D	820Ω,1/16W
R3969	NRSA6AJ-102W	MG RESISTOR,D	1kΩ,1/16W
R4202	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4203	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4204	NRSA6AJ-220W	MG RESISTOR	22Ω,1/16W
R4205	NRSA6AJ-243W	MG RESISTOR	24kΩ,1/16W
R4206	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4207	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4208	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4301	NRSA6AJ-101W	MG RESISTOR	100Ω,1/16W
R4302	NRSA6AJ-100W	MG RESISTOR	10Ω,1/16W
R4303	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4307	NRSA6AD-333W	MG RESISTOR	33kΩ,1/16W
R4308	NRSA6AD-682W	MG RESISTOR	6.8kΩ,1/16W
R4311	NRSA6AD-272W	MG RESISTOR	2.7kΩ,1/16W
R4312	NRSA6AD-272W	MG RESISTOR	2.7kΩ,1/16W
R4313	NRSA6AD-272W	MG RESISTOR	2.7kΩ,1/16W
R4314	NRSA6AD-123W	MG RESISTOR	12kΩ,1/16W
R4315	NRSA6AD-103W	MG RESISTOR	10kΩ,1/16W
R4316	NRSA6AD-111W	MG RESISTOR	110Ω,1/16W
R4317	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4318	NRSA6AJ-152W	MG RESISTOR	1.5kΩ,1/16W
R4319	NRSA6AD-111W	MG RESISTOR	110Ω,1/16W
R4320	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4321	NRSA6AJ-152W	MG RESISTOR	1.5kΩ,1/16W
R4322	NRSA6AD-111W	MG RESISTOR	110Ω,1/16W
R4323	NRSA6AD-101W	MG RESISTOR	100Ω,1/16W
R4324	NRSA6AJ-152W	MG RESISTOR	1.5kΩ,1/16W
R4326	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4327	NRSA6AJ-152W	MG RESISTOR	1.5kΩ,1/16W
R4333	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4336	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4338	NRSA6AJ-220W	MG RESISTOR	22Ω,1/16W
R4340	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4343	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4344	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
R4346	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R4347	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
R4348	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
R4349	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
R4350	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
R4351	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
R4804	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
R4805	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R4806	NRSA6AJ-683W	MG RESISTOR	68kΩ,1/16W
R4807	NRSA6AJ-823W	MG RESISTOR	82kΩ,1/16W
R4808	NRSA6AJ-243W	MG RESISTOR	24kΩ,1/16W
R4809	NRSA6AJ-681W	MG RESISTOR	680Ω,1/16W
R4810	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R4811	NRSA6AJ-824W	MG RESISTOR	820kΩ,1/16W
R4812	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
R4814	NRSA6AJ-105W	MG RESISTOR	1MΩ,1/16W
R4815	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R4816	NRSA6AJ-105W	MG RESISTOR	1MΩ,1/16W
R4817	NRSA6AJ-334W	MG RESISTOR	330kΩ,1/16W
R4818	NRSA6AJ-154W	MG RESISTOR	150kΩ,1/16W
R4819	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
R4820	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R4821	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R4822	NRSA6AJ-333W	MG RESISTOR	33kΩ,1/16W
R4823	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4824	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
R4833	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
R4836	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4856	NRSA63J-6R8X	MG RESISTOR	6.8Ω,1/16W
R4857	NRSA63J-6R8X	MG RESISTOR	6.8Ω,1/16W
R4858	NRSA6AJ-333W	MG RESISTOR	33kΩ,1/16W
R4862	NRSA63J-6R8X	MG RESISTOR	6.8Ω,1/16W
R4863	NRSA63J-6R8X	MG RESISTOR	6.8Ω,1/16W
R4864	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4865	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4866	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4867	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
R4868	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	R4870	NRVA6AD-271W	MG RESISTOR	270Ω,1/16W
	R4874	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R5501	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R5503	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R5504	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R5505	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R5506	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R5507	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R5509	NRSA6AJ-470W	MG RESISTOR	47Ω,1/16W
	R5510	NRSA6AJ-470W	MG RESISTOR	47Ω,1/16W
	R5511	NRSA6AJ-470W	MG RESISTOR	47Ω,1/16W
	R5512	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
	R5513	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
	R5514	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
	R6001	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
	R6002	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
	R6003	NRSA6AJ-224W	MG RESISTOR	220kΩ,1/16W
	R6004	NRSA6AJ-183W	MG RESISTOR	18kΩ,1/16W
	R6005	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
⚠	R6009	NRSA63J-102X	MG RESISTOR	1kΩ,1/16W
	R6010	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
	R6011	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
	R6012	NRVA6AD-104W	CMF RESISTOR	100kΩ,1/16W
	R6013	NRVA6AD-683W	CMF RESISTOR	68kΩ,1/16W
	R6015	NRVA6AD-104W	CMF RESISTOR	100kΩ,1/16W
	R6016	NRVA6AD-333W	CMF RESISTOR	33kΩ,1/16W
	R6101	NRVA6AD-103W	CMF RESISTOR	10kΩ,1/16W
	R6102	NRVA6AD-751W	CMF RESISTOR	750Ω,1/16W
	R6103	NRVA6AD-333W	CMF RESISTOR	33kΩ,1/16W
	R6104	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
	R6105	NRVA6AD-123W	CMF RESISTOR	12kΩ,1/16W
	R6106	NRSA6AJ-333W	MG RESISTOR	33kΩ,1/16W
	R6107	NRVA6AD-562W	CMF RESISTOR	5.6kΩ,1/16W
	R6108	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
	R6110	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R6113	NRSA6AJ-472W	MG RESISTOR	4.7kΩ,1/16W
	R6114	NRSA6AJ-823W	MG RESISTOR	82kΩ,1/16W
	R6115	NRSA6AJ-823W	MG RESISTOR	82kΩ,1/16W
	R6116	NRVA6AD-153W	CMF RESISTOR	15kΩ,1/16W
	R6117	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R6118	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
	R6122	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
	R6124	NRSA6AJ-102W	MG RESISTOR,A,B,C	1kΩ,1/16W
	R6201	NRVA6AD-243W	CMF RESISTOR	24kΩ,1/16W
	R6203	NRVA6AD-123W	CMF RESISTOR	12kΩ,1/16W
	R6204	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
	R6205	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
	R6206	NRVA6AD-183W	CMF RESISTOR	18kΩ,1/16W
	R6207	NRVA6AD-123W	CMF RESISTOR	12kΩ,1/16W
	R6208	NRVA6AD-123W	CMF RESISTOR	12kΩ,1/16W
	R6209	NRVA6AD-153W	CMF RESISTOR	15kΩ,1/16W
	R6210	NRVA6AD-183W	CMF RESISTOR	18kΩ,1/16W
	R6212	NRVA6AD-472W	CMF RESISTOR	4.7kΩ,1/16W
	R6213	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
	R6214	NRSA6AJ-152W	MG RESISTOR	1.5kΩ,1/16W
	R6215	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
	R6217	NRSA6AJ-151W	MG RESISTOR	150Ω,1/16W
	R6218	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
	R6219	NRVA6AD-243W	CMF RESISTOR	24kΩ,1/16W
	R6220	NRVA6AD-302W	CMF RESISTOR	3kΩ,1/16W
	R6221	NRVA6AD-104W	CMF RESISTOR	100kΩ,1/16W
	R6223	NRVA6AD-123W	CMF RESISTOR	12kΩ,1/16W
	R6224	NRVA6AD-473W	CMF RESISTOR	47kΩ,1/16W
	R6225	NRVA6AD-562W	CMF RESISTOR	5.6kΩ,1/16W
	R6226	NRVA6AD-223W	CMF RESISTOR	22kΩ,1/16W
	R6227	NRVA6AD-473W	CMF RESISTOR	47kΩ,1/16W
	R6228	NRVA6AD-473W	CMF RESISTOR	47kΩ,1/16W
	R6229	NRVA6AD-332W	CMF RESISTOR	3.3kΩ,1/16W
	R6230	NRSA6AJ-272W	MG RESISTOR	2.7kΩ,1/16W
	R6231	NRVA6AD-104W	CMF RESISTOR	100kΩ,1/16W
	R6232	NRVA6AD-473W	CMF RESISTOR	47kΩ,1/16W
	R6233	NRSA6AJ-822W	MG RESISTOR	8.2kΩ,1/16W
	R6234	NRSA6AJ-273W	MG RESISTOR	27kΩ,1/16W
	R6235	NRVA6AD-683W	CMF RESISTOR	68kΩ,1/16W
	R6236	NRVA6AD-473W	CMF RESISTOR	47kΩ,1/16W
	R6237	NRVA6AD-753W	CMF RESISTOR	75kΩ,1/16W
	R6238	NRVA6AD-104W	CMF RESISTOR	100kΩ,1/16W
	R6239	NRSA6AJ-103W	MG RESISTOR	10kΩ,1/16W
	R6240	NRSA6AJ-333W	MG RESISTOR	33kΩ,1/16W
	R6241	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
	R6242	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
	R6243	NRSA6AJ-823W	MG RESISTOR	82kΩ,1/16W
	R6244	NRSA6AJ-152W	MG RESISTOR	1.5kΩ,1/16W
	R6245	NRSA6AJ-562W	MG RESISTOR	5.6kΩ,1/16W
	R6246	NRSA6AJ-222W	MG RESISTOR	2.2kΩ,1/16W
	R6701	NRZ0058-R20X	MG RESISTOR	0.2Ω
	R6702	NRVA6AD-104W	CMF RESISTOR	100kΩ,1/16W
	R6703	NRVA6AD-123W	CMF RESISTOR	12kΩ,1/16W
	R6712	NRVA6AD-823W	CMF RESISTOR	82kΩ,1/16W
	R6713	NRVA6AD-333W	CMF RESISTOR	33kΩ,1/16W
	R8001	NRSA63J-270X	MG RESISTOR	27Ω,1/16W
	R8002	NRSA6AJ-101W	MG RESISTOR	100Ω,1/16W
	R8003	NRSA6AJ-101W	MG RESISTOR	100Ω,1/16W
	R8004	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
	R8006	NRSA6AJ-102W	MG RESISTOR	1kΩ,1/16W
	R8013	NRSA6AJ-821W	MG RESISTOR	820Ω,1/16W
	R8014	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8015	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8016	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8017	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8018	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8019	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8020	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8021	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8022	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8023	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8024	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8025	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8026	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8027	NRSA6AJ-104W	MG RESISTOR	100kΩ,1/16W
	R8030	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8031	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
	R8035	NRSA6AJ-331W	MG RESISTOR	330Ω,1/16W
	R8038	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8056	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8059	NRSA6AJ-473W	MG RESISTOR	47kΩ,1/16W
	R8060	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8401	NRSA6AJ-105W	MG RESISTOR	1MΩ,1/16W
	R8402	NRS181J-220X	MG RESISTOR	22Ω,1/8W
	R8403	NRS181J-220X	MG RESISTOR	22Ω,1/8W
	R8404	NRSA6AJ-152W	MG RESISTOR	1.5kΩ,1/16W
	R8406	NRSA6AJ-153W	MG RESISTOR	15kΩ,1/16W
	R8407	NRSA6AJ-0R0W	MG RESISTOR	0Ω,1/16W
	R8408	NRSA6AJ-223W	MG RESISTOR	22kΩ,1/16W
	R8409	NRSA6AJ-105W	MG RESISTOR	1MΩ,1/16W
	RA1001	NRZ0034-102W	NETWORK RESISTOR	1kΩ

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
RA1002	NRZ0034-102W	NETWORK RESISTOR	1kΩ
RA1003	NRZ0034-102W	NETWORK RESISTOR	1kΩ
RA1004	NRZ0034-102W	NETWORK RESISTOR	1kΩ
RA1005	NRZ0034-102W	NETWORK RESISTOR	1kΩ
RA1006	NRZ0034-102W	NETWORK RESISTOR	1kΩ
RA1007	NRZ0034-102W	NETWORK RESISTOR	1kΩ
RA1008	NRZ0034-104W	NETWORK RESISTOR	100kΩ
RA1009	NRZ0034-104W	NETWORK RESISTOR	100kΩ
RA1010	NRZ0034-104W	NETWORK RESISTOR	100kΩ
RA1401	NRZ0034-473W	NETWORK RESISTOR	47kΩ
RA1402	NRZ0034-102W	NETWORK RESISTOR	1kΩ
RA1403	NRZ0034-102W	NETWORK RESISTOR	1kΩ
RA4301	NRZ0034-101W	NETWORK RESISTOR	100Ω
RA4302	NRZ0034-101W	NETWORK RESISTOR	100Ω
RA4303	NRZ0034-101W	NETWORK RESISTOR	100Ω
RA4304	NRZ0034-100W	NETWORK RESISTOR	10Ω
RA4305	NRZ0034-100W	NETWORK RESISTOR	10Ω
RA4306	NRZ0034-100W	NETWORK RESISTOR	10Ω
RA8401	NRZ0034-221W	NETWORK RESISTOR	220Ω
RA8402	NRZ0034-221W	NETWORK RESISTOR	220Ω
RA8403	NRZ0034-100W	NETWORK RESISTOR	10Ω
RA8404	NRZ0034-100W	NETWORK RESISTOR	10Ω
C1001	NBE20JM-226X	T CAPACITOR	22μF,6.3V
C1002	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1003	NBE20JM-226X	T CAPACITOR	22μF,6.3V
C1004	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1005	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1006	NDCA1HJ-130W	CAPACITOR	13pF,50V
C1007	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1008	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1009	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1010	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1011	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1012	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1013	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1014	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1015	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1016	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1017	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1018	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1019	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1023	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1024	NDCA1HJ-100W	CAPACITOR	10pF,50V
C1025	NDCA1HJ-100W	CAPACITOR	10pF,50V
C1026	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1027	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1028	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1029	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1030	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1031	NCB30JK-105X	CAPACITOR	1μF,6.3V
C1036	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1039	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1040	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1301	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C1307	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C1401	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C1402	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C1405	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1406	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1408	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1409	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1410	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1411	NCFA1AZ-104W	CAPACITOR	0.1μF,10V

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C1412	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1413	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C1414	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1415	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1416	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1417	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C1418	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C1419	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C1420	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C1601	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1602	NBE21AM-106X	T CAPACITOR	10μF,10V
C1603	NBE21AM-106X	T CAPACITOR	10μF,10V
C1605	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C1606	NCB31HK-152X	CAPACITOR	0.0015μF,50V
C1607	NCBA1AK-473W	CAPACITOR	0.047μF,10V
C1614	NBE21AM-106X	T CAPACITOR	10μF,10V
C1618	NCBA1HK-222W	CAPACITOR	0.0022μF,50V
C1619	NCBA1HK-222W	CAPACITOR	0.0022μF,50V
C1620	NCBA1HK-222W	CAPACITOR	0.0022μF,50V
C1621	NCB21CK-105X	CAPACITOR	1μF,16V
C1622	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C1623	NCBA1AK-473W	CAPACITOR	0.047μF,10V
C1624	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C1625	NCBA1AK-473W	CAPACITOR	0.047μF,10V
C1626	NCBA1HK-331W	CAPACITOR	330pF,50V
C1627	NCBA1CK-822W	CAPACITOR	0.0082μF,16V
C1628	NCB21CK-224X	CAPACITOR	0.22μF,16V
C1632	NBE21AM-106X	T CAPACITOR	10μF,10V
C1633	NCB21CK-474X	CAPACITOR	0.47μF,16V
C1635	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C1641	NCB21CK-474X	CAPACITOR	0.47μF,16V
C2001	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C2002	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C2004	NCB21CK-105X	CAPACITOR	1μF,16V
C2005	NCB21CK-105X	CAPACITOR	1μF,16V
C2006	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
	NCBA1CK-103W	CAPACITOR,A,B,C	0.01μF,16V
C2007	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
	NCBA1CK-103W	CAPACITOR,A,B,C	0.01μF,16V
C2008	NCB21CK-105X	CAPACITOR	1μF,16V
C2009	NCB21CK-105X	CAPACITOR	1μF,16V
C2010	NCB21CK-105X	CAPACITOR	1μF,16V
C2011	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C2012	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C2013	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C2014	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C2015	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C2016	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2017	NCBA1AK-333W	CAPACITOR	0.033μF,10V
C2018	NCB31CK-104X	CAPACITOR	0.1μF,16V
C2019	NCB31CK-104X	CAPACITOR	0.1μF,16V
C2020	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C2021	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C2101	NCB31CK-104X	CAPACITOR	0.1μF,16V
C2102	NCB31CK-104X	CAPACITOR	0.1μF,16V
C2103	NCB21CK-105X	CAPACITOR	1μF,16V
C2104	NCB21CK-105X	CAPACITOR	1μF,16V
C2109	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C2110	NCB21CK-105X	CAPACITOR	1μF,16V
C2111	NCBA1EK-472W	CAPACITOR	0.0047μF,25V
C2112	NCBA1EK-472W	CAPACITOR	0.0047μF,25V
C2113	NCBA1EK-472W	CAPACITOR	0.0047μF,25V
C2114	NCBA1EK-472W	CAPACITOR	0.0047μF,25V

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C2115	NCB31CK-104X	CAPACITOR	0.1μF,16V
C2116	NCB31CK-104X	CAPACITOR	0.1μF,16V
C2121	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2122	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2123	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2124	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2125	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2126	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2131	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C2132	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C2133	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2134	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C2201	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C2202	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3001	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C3003	NCB21CK-105X	CAPACITOR	1μF,16V
C3004	NCB21CK-105X	CAPACITOR	1μF,16V
C3005	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C3007	NCB11CK-105X	CAPACITOR	1μF,16V
C3008	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C3011	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3012	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3013	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3015	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3016	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3017	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3020	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3021	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3022	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3023	NDCA1HJ-330W	CAPACITOR	33pF,50V
C3024	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C3025	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3026	NCB30JK-105X	CAPACITOR	1μF,6.3V
C3027	NCBA1EK-472W	CAPACITOR	0.0047μF,25V
C3028	NDCA1EJ-271W	CAPACITOR	270pF,25V
C3029	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3030	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3031	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3032	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C3033	NDCA1HJ-470W	CAPACITOR	47pF,50V
C3034	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C3035	NDCA1HJ-330W	CAPACITOR	33pF,50V
C3038	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3039	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3040	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3041	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3042	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3043	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3044	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3045	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3046	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3047	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3051	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3052	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C3053	NCBA1AK-473W	CAPACITOR	0.047μF,10V
C3056	NCB30JK-105X	CAPACITOR	1μF,6.3V
C3057	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3058	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3060	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3061	NCB21CK-105X	CAPACITOR	1μF,16V
C3062	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3063	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3064	NCBA1CK-103W	CAPACITOR	0.01μF,16V

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C3501	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C3502	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C3503	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C3504	NCBA1AK-473W	CAPACITOR	0.047μF,10V
C3505	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C3506	NCB21CK-105X	CAPACITOR	1μF,16V
C3507	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3508	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3509	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3510	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3511	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3512	NCB31CK-104X	CAPACITOR	0.1μF,16V
C3513	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3514	NCBA1AK-473W	CAPACITOR	0.047μF,10V
C3515	NCBA1AK-473W	CAPACITOR	0.047μF,10V
C3516	NCBA1AK-473W	CAPACITOR	0.047μF,10V
C3517	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3518	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3519	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C3520	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3521	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C3522	NCB20JM-475X	CAPACITOR	4.7μF,6.3V
C3523	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3524	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3525	NCB20JM-475X	CAPACITOR	4.7μF,6.3V
C3526	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3527	NDCA1EJ-221W	CAPACITOR	220pF,25V
C3701	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C3702	NDCA1HJ-101W	CAPACITOR,D	100pF,50V
	NDCA1HJ-151W	CAPACITOR,A,B,C	150pF,50V
C3703	NDCA1HJ-330W	CAPACITOR	33pF,50V
C3704	NDCA1HJ-101W	CAPACITOR	100pF,50V
C3705	NDCA1HJ-330W	CAPACITOR	33pF,50V
C3706	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3707	NCFA1AZ-104W	CAPACITOR	0.1μF,10V
C3708	NCB30JK-105X	CAPACITOR	1μF,6.3V
C3709	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3710	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C3711	NBE20GM-226X	T CAPACITOR	22μF,4.0V
C3712	NBE40GM-107X	T CAPACITOR	100μF,4.0V
C3713	NBE40GM-107X	T CAPACITOR	100μF,4.0V
C3714	NBE20GM-226X	T CAPACITOR	22μF,4.0V
C3716	NCBA1CK-103W	CAPACITOR,D	0.01μF,16V
C3717	NCB30JK-105X	CAPACITOR,D	1μF,6.3V
C3718	NCB30JK-105X	CAPACITOR,D	1μF,6.3V
C3901	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3902	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3903	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3904	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3905	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3906	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3907	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3908	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3909	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3910	NCBA1CK-103W	CAPACITOR,D	0.01μF,16V
C3911	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3912	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3913	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3914	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3915	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3916	NBE20JM-106X	T CAPACITOR,D	10μF,6.3V
C3917	NCBA1AK-104W	CAPACITOR,D	0.1μF,10V
C3919	NCB21CK-105X	CAPACITOR,D	1μF,16V

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C3920	NBE20JM-106X	T CAPACITOR,D	10µF,6.3V
C3923	NBE20JM-106X	T CAPACITOR,D	10µF,6.3V
C3951	NBE20JM-226X	T CAPACITOR,D	22µF,6.3V
C3954	NCBA1AK-104W	CAPACITOR,D	0.1µF,10V
C3955	NDCA1HJ-3R0W	CAPACITOR,D	3pF,50V
C3956	NDCA1HJ-5R0W	CAPACITOR,D	5pF,50V
C3957	NDCA1HJ-330W	CAPACITOR,D	33pF,50V
C3958	NCB20JM-475X	CAPACITOR,D	4.7µF,6.3V
C3959	NCBA1CK-103W	CAPACITOR,D	0.01µF,16V
C3961	NCBA1HK-102W	CAPACITOR,D	0.001µF,50V
C3962	NDCA1HJ-3R0W	CAPACITOR,D	3pF,50V
C3963	NDCA1HJ-5R0W	CAPACITOR,D	5pF,50V
C3964	NDCA1HJ-330W	CAPACITOR,D	33pF,50V
C3965	NCBA1HK-102W	CAPACITOR,D	0.001µF,50V
C3967	NCBA1CK-103W	CAPACITOR,D	0.01µF,16V
C3968	NCBA1CK-103W	CAPACITOR,D	0.01µF,16V
C4201	NBE40GM-107X	T CAPACITOR	100µF,4.0V
C4202	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4203	NCB30JK-105X	CAPACITOR	1µF,6.3V
C4204	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4205	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4206	NCB21CK-105X	CAPACITOR	1µF,16V
C4207	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4208	NCBA1HK-392W	CAPACITOR	0.0039µF,50V
C4209	NCB30JK-105X	CAPACITOR	1µF,6.3V
C4210	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4211	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4212	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4213	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4214	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4215	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4216	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4301	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4303	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4304	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4305	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4306	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4307	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4308	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4309	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4310	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4311	NCB30JK-105X	CAPACITOR	1µF,6.3V
C4312	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4313	NBE20JM-226X	T CAPACITOR	22µF,6.3V
C4314	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4315	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4317	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4318	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4319	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4320	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4321	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4323	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4324	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4325	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4327	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4328	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4329	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4330	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4331	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4332	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4333	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4334	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4335	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4336	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4337	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4338	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4339	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4340	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4341	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4342	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4343	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4344	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4345	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4346	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4347	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4348	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4349	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4350	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C4803	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4804	NCFA1AZ-104W	CAPACITOR	0.1µF,10V
C4805	NCFA1AZ-104W	CAPACITOR	0.1µF,10V
C4806	NCFA1AZ-104W	CAPACITOR	0.1µF,10V
C4808	NCB30JK-105X	CAPACITOR	1µF,6.3V
C4809	NCFA1AZ-104W	CAPACITOR	0.1µF,10V
C4810	NCBA1CK-103W	CAPACITOR	0.01µF,16V
C4811	NCBA1CK-103W	CAPACITOR	0.01µF,16V
C4812	NCFA1AZ-104W	CAPACITOR	0.1µF,10V
C4813	NCFA1AZ-104W	CAPACITOR	0.1µF,10V
C4814	NCFA1AZ-104W	CAPACITOR	0.1µF,10V
C4815	NCB31HK-152X	CAPACITOR	0.0015µF,50V
C4819	NCB31CK-104X	CAPACITOR	0.1µF,16V
C4851	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4852	NCFA1AZ-104W	CAPACITOR	0.1µF,10V
C4853	NBE21AM-335X	T CAPACITOR	3.3µF,10V
C4854	NBE21AM-106X	T CAPACITOR	10µF,10V
C4855	NCB31CK-104X	CAPACITOR	0.1µF,16V
C4858	NDCA1HJ-330W	CAPACITOR	33pF,50V
C4859	NCBA1HK-102W	CAPACITOR	0.001µF,50V
C4860	NCBA1HK-102W	CAPACITOR	0.001µF,50V
C4861	NCBA1HK-102W	CAPACITOR	0.001µF,50V
C4862	NCBA1HK-102W	CAPACITOR	0.001µF,50V
C4864	NBE20JM-106X	T CAPACITOR	10µF,6.3V
C4865	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5501	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5503	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5504	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5505	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5506	NBE40JM-476X	T CAPACITOR	47µF,6.3V
C5507	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5508	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5509	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5510	NBP21VM-105X	T CAPACITOR	1µF,35V
C5511	NBP21DM-475X	T CAPACITOR	4.7µF,20V
C5512	NBE21AM-106X	T CAPACITOR	10µF,10V
C5513	NCB31CK-104X	CAPACITOR	0.1µF,16V
C5514	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5515	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5516	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5517	NCB31CK-104X	CAPACITOR	0.1µF,16V
C5518	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C5519	NCBA1AK-104W	CAPACITOR	0.1µF,10V
C6001	NCBA1CK-103W	CAPACITOR	0.01µF,16V
C6004	NCB21CK-105X	CAPACITOR	1µF,16V
C6005	NDCA1HJ-101W	CAPACITOR	100pF,50V
C6101	NCB21CK-105X	CAPACITOR	1µF,16V
C6102	NEA71CM-106X	E CAPACITOR	10µF,16V

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C6103	NCB21CK-105X	CAPACITOR	1μF,16V
C6105	NCB21CK-105X	CAPACITOR	1μF,16V
C6106	NCB21CK-105X	CAPACITOR	1μF,16V
C6107	NCB21CK-105X	CAPACITOR	1μF,16V
C6108	NCB21CK-105X	CAPACITOR	1μF,16V
C6109	NCB21CK-105X	CAPACITOR	1μF,16V
C6110	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C6111	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C6112	NCBA1AK-333W	CAPACITOR	0.033μF,10V
C6113	NCBA1HK-561W	CAPACITOR	560pF,50V
C6114	NCBA1HK-272W	CAPACITOR	0.0027μF,50V
C6115	NCBA1HK-561W	CAPACITOR	560pF,50V
C6116	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C6117	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C6118	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C6119	NDCA1HJ-101W	CAPACITOR	100pF,50V
C6120	NCB11CK-105X	CAPACITOR	1μF,16V
C6121	NCB31CK-104X	CAPACITOR	0.1μF,16V
C6122	NCBA1CK-223W	CAPACITOR	0.022μF,16V
C6123	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C6124	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C6125	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C6126	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C6127	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C6128	NCB21CK-105X	CAPACITOR	1μF,16V
C6129	NCBA1HK-561W	CAPACITOR	560pF,50V
C6131	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C6132	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C6133	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C6201	NCB21CK-105X	CAPACITOR	1μF,16V
C6202	NCB10JK-106X	CAPACITOR	10μF,6.3V
C6203	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C6204	NCBA1HK-561W	CAPACITOR	560pF,50V
C6205	NCB21CK-105X	CAPACITOR	1μF,16V
C6206	NCB21CK-105X	CAPACITOR	1μF,16V
C6207	NCB10JK-106X	CAPACITOR	10μF,6.3V
C6208	NCBA1EK-472W	CAPACITOR	0.0047μF,25V
C6209	NCB21CK-105X	CAPACITOR	1μF,16V
C6210	NCB10JK-106X	CAPACITOR	10μF,6.3V
C6211	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C6212	NCB21CK-105X	CAPACITOR	1μF,16V
C6213	NCB11EK-105X	CAPACITOR	1μF,25V
C6214	NCB21CK-105X	CAPACITOR	1μF,16V
C6215	NCB21CK-105X	CAPACITOR	1μF,16V
C6216	NCBA1AK-683W	CAPACITOR	0.068μF,10V
C6217	NCB21CK-105X	CAPACITOR	1μF,16V
C6218	NCB21CK-105X	CAPACITOR	1μF,16V
C6219	NCB21CK-224X	CAPACITOR	0.22μF,16V
C6220	NCB21CK-105X	CAPACITOR	1μF,16V
C6221	NCB11EK-105X	CAPACITOR	1μF,25V
C6222	NCB11EK-105X	CAPACITOR	1μF,25V
C6224	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C6225	NCBA1CK-103W	CAPACITOR	0.01μF,16V
C6226	NCB21CK-105X	CAPACITOR	1μF,16V
C6227	NCB11EK-105X	CAPACITOR	1μF,25V
C6228	NCB11EK-105X	CAPACITOR	1μF,25V
C6230	NCB21CK-105X	CAPACITOR	1μF,16V
C6231	NCBA1CK-103W	CAPACITOR,A,B,C	0.01μF,16V
C6701	NCB21CK-105X	CAPACITOR	1μF,16V
C6703	NCB11CK-105X	CAPACITOR	1μF,16V
C8001	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8002	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C8003	NCBA1AK-104W	CAPACITOR	0.1μF,10V

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C8005	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8006	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8007	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8008	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8009	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8010	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8011	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8012	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8013	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8014	NBE40JM-476X	T CAPACITOR	47μF,6.3V
C8015	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8016	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8017	NCBA1HK-102W	CAPACITOR	0.001μF,50V
C8018	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8019	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8020	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8021	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8022	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8023	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8024	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8025	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C8026	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8030	NDCA1HJ-150W	CAPACITOR	15pF,50V
C8039	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8040	NDCA1HJ-270W	CAPACITOR	27pF,50V
C8045	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C8046	NBE21AM-106X	T CAPACITOR	10μF,10V
C8047	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8401	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C8402	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8403	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8404	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8405	NCBA1AK-104W	CAPACITOR	0.1μF,10V
C8406	NBE21AM-106X	T CAPACITOR	10μF,10V
C8407	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C8408	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C8409	NCBA1AK-104W	CAPACITOR	0.1μF,10V
L1001	NQL315K-100X	COIL	10μH
L1002	NQL315K-100X	COIL	10μH
L1401	NQR0006-001X	FERRITE BEAD	
L1402	NRSA02J-0R0X	MG RESISTOR	0Ω,1/10W
L2001	NQL315K-100X	COIL	10μH
L2002	NQL38DK-220X	COIL	22μH
L3001	NQR0006-001X	FERRITE BEAD	
L3002	NQR0129-002X	FERRITE BEAD	
L3003	NQR0129-002X	FERRITE BEAD	
L3004	NQR0006-001X	FERRITE BEAD	
L3005	NQR0129-002X	FERRITE BEAD	
L3006	NQR0006-001X	FERRITE BEAD	
L3007	NQL085J-2R2X	COIL	2.2μH
L3008	NQL085J-120X	COIL	12μH
L3009	NQL085J-120X	COIL	12μH
L3012	NQR0006-001X	FERRITE BEAD	
L3013	NQR0006-001X	FERRITE BEAD	
L3501	NQR0129-002X	FERRITE BEAD	
L3502	NQL302N-100X	COIL	10μH
L3503	NQR0006-001X	FERRITE BEAD	
L3504	NQR0006-001X	FERRITE BEAD	
L3505	NQR0006-001X	FERRITE BEAD	
L3701	NQL38DK-100X	COIL	10μH
L3901	NQR0006-001X	FERRITE BEAD,D	
L3902	NQR0129-002X	FERRITE BEAD,D	
L3903	NQR0129-002X	FERRITE BEAD,D	

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	L3904	NQL38DK-100X	COIL,D	10µH
	L3951	NQL302N-100X	COIL,D	10µH
	L3952	NQL085J-6R8X	COIL,D	6.8µH
	L3953	NQL085J-6R8X	COIL,D	6.8µH
	L4201	NQR0129-002X	FERRITE BEAD	
	L4301	NQR0129-002X	FERRITE BEAD	
	L4302	NQR0129-002X	FERRITE BEAD	
	L4303	NQL38DK-100X	COIL	10µH
	L4304	NQL38DK-100X	COIL	10µH
	L4305	NQR0129-002X	FERRITE BEAD	
	L4306	NQR0129-002X	FERRITE BEAD	
	L4307	NQL38DK-100X	COIL	10µH
	L4802	NQL302N-100X	COIL	10µH
	L4851	NQR0129-002X	FERRITE BEAD	
	L4852	NQL38DK-100X	COIL	10µH
	L4853	NQL38DK-100X	COIL	10µH
	L5501	NQL38DK-100X	COIL	10µH
	L5502	NQR0129-002X	FERRITE BEAD	
	L5503	NQR0129-002X	FERRITE BEAD	
	L5504	NQR0129-002X	FERRITE BEAD	
	L5505	NQL38DK-100X	COIL	10µH
	L5506	NQL38DK-100X	COIL	10µH
	L6101	NQLZ011-4R7X	COIL	4.7µH
	L6102	NQLZ011-4R7X	COIL	4.7µH
	L6201	NQLZ011-390X	COIL	39µH
	L6202	NQLZ011-390X	COIL	39µH
	L6203	NQLZ011-390X	COIL	39µH
	L6204	NQL144K-220X	COIL	22µH
	L6205	NQL35BK-100X	COIL	10µH
	L6206	NQLZ011-470X	COIL	47µH
	L6207	NQLZ011-470X	COIL	47µH
	L6208	NQLZ011-221X	COIL	220µH
	L6209	NQL144K-221X	COIL	220µH
	L6210	NQL144K-220X	COIL	220µH
	L6701	NQLZ007-100X	COIL	10µH
	L8001	NQL38DK-100X	COIL	10µH
	L8002	NQL034K-150X	COIL	15µH
	L8003	NQR0006-001X	FERRITE BEAD	
	L8401	NQR0006-001X	FERRITE BEAD	
	L8402	NQR0006-001X	FERRITE BEAD	
	X1001	NAX0424-001X	C OSCILLATOR	
	X1002	NAX0325-001X	CRYSTAL RESONATOR	
	X5501	NAX0356-001X	CXO	
	X8001	NAX0354-001X	RESONATOR	
	X8401	NAX0398-001X	C OSCILLATOR	
	S6001	NSW0096-001X	SLIDE SWITCH,CPU ROM	
	WR1	WJT0045-001A	E-CARD WIRE,CN103-JACK	
	WR2	WJJ0206-001A	E-SI C WIRE C-C,CN104-REAR	
	J101	NNZ0041-001X	D CONNECTOR	
	CN101	QGF0508F1-50X	FPC CONNECTOR	
	CN102	QGA1002F1-09X	CONNECTOR	
	CN103	QGF0505F2-14X	FPC CONNECTOR	
	CN104	QGA1002C1-10X	CONNECTOR	
	CN105	QGB0801K2-20X	CONNECTOR	
	CN106	QGA1201F2-03X	CONNECTOR	
	CN107	QGF0507F3-20X	FFC/FPC CONNECTOR	
	CN108	QGF0507F3-24X	FFC/FPC CONNECTOR	
	CN109	QGF0507F3-15X	FFC/FPC CONNECTOR	
	CN110	QGF0505F1-08X	FPC CONNECTOR	
	CN111	QGF0503C1-06V	FFC/FPC CONNECTOR	
	CN112	QGF0505F2-18X	FPC CONNECTOR	
	CN113	QGF0508F1-34X	FPC CONNECTOR	
⚠	F6101	NMFZ007-2R0X-K	FUSE	2.0A

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	OT1	LY43018-001A	SHIELD SHEET
	SD1	LY32080-001A	SHIELD CASE

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MONITOR BOARD ASSEMBLY <02>

REF No.	PART No.	PART NAME, DESCRIPTION	
PW1	YB10324D1-02	MONITOR BOARD ASSY,D	
	YB10324D1-03	MONITOR BOARD ASSY,B	
	YB10324G1-03	MONITOR BOARD ASSY,C	
	YB10324H1-03	MONITOR BOARD ASSY,A	
IC7101	MM1385EN	IC,A,B,C	
IC7601	AN2540FHQ	IC	
IC7602	BA15532F	IC	
IC7603	X25057M8-2.7-X	IC	
IC7604	SN74LV08APW	IC	
Q7101	2SA1774/QR/-X	TRANSISTOR,A,C	
Q7601	2SC4617/QR/-X	TRANSISTOR	
Q7602	2SA1774/QR/-X	TRANSISTOR	
Q7603	2SC4617/QR/-X	TRANSISTOR	
Q7604	2SA1774/QR/-X	TRANSISTOR	
Q7605	DTA144EE	TRANSISTOR,B,C,D	
	or UN9113J	TRANSISTOR,B,C,D	
	or RN2104	TRANSISTOR,B,C,D	
Q7606	DTC144EE	TRANSISTOR,B,C,D	
	or RN1104	TRANSISTOR,B,C,D	
	or UN9213J	TRANSISTOR,B,C,D	
Q7607	UMZ1N	PAIR TRANSISTOR,B,D	
Q7608	DTC144EE	TRANSISTOR	
	or RN1104	TRANSISTOR	
	or UN9213J	TRANSISTOR	
Q7609	DTC144EE	TRANSISTOR	
	or UN9213J	TRANSISTOR	
	or RN1104	TRANSISTOR	
Q7610	DTA144EE	TRANSISTOR	
	or RN2104	TRANSISTOR	
	or UN9113J	TRANSISTOR	
D1	SML-110LT-X	LE DIODE,TALLY	
D7601	RB471E	SB DIODE	
R1	NRSA63J-103X	MG RESISTOR	10kΩ,1/16W
R2	NRSA63J-103X	MG RESISTOR	10kΩ,1/16W
R3	NRSA63J-103X	MG RESISTOR	10kΩ,1/16W
R4	NRSA63J-152X	MG RESISTOR	1.5kΩ,1/16W
R5	NRSA63J-182X	MG RESISTOR	1.8kΩ,1/16W
R6	NRSA63J-272X	MG RESISTOR	2.7kΩ,1/16W
R10	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R11	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R12	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R13	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R14	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R15	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R16	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R17	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R18	NRSA63J-473X	MG RESISTOR	47kΩ,1/16W
R19	NRSA63J-103X	MG RESISTOR	10kΩ,1/16W
R21	NRSA63J-103X	MG RESISTOR	10kΩ,1/16W
R22	NRSA63J-473X	MG RESISTOR	47kΩ,1/16W
R23	NRSA63J-104X	MG RESISTOR	100kΩ,1/16W
R24	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R27	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
R7101	NRSA63J-562X	MG RESISTOR,A,C	5.6kΩ,1/16W

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
R7102	NRSA63J-562X	MG RESISTOR,A,C	5.6kΩ,1/16W
R7103	NRSA63J-103X	MG RESISTOR,A,C	10kΩ,1/16W
R7104	NRSA63J-0R0X	MG RESISTOR,A,C	0Ω,1/16W
R7110	NRSA63J-0R0X	MG RESISTOR,A,C	0Ω,1/16W
R7111	NRSA63J-0R0X	MG RESISTOR,A,C	0Ω,1/16W
R7112	NRSA63J-0R0X	MG RESISTOR,A,C	0Ω,1/16W
R7113	NRSA63J-0R0X	MG RESISTOR,A,C	0Ω,1/16W
R7114	NRSA63J-0R0X	MG RESISTOR,A,C	0Ω,1/16W
R7115	NRSA63J-0R0X	MG RESISTOR,A,C	0Ω,1/16W
R7601	NRVA63D-622X	CMF RESISTOR	6.2kΩ,1/16W
R7602	NRSA63J-153X	MG RESISTOR	15kΩ,1/16W
R7603	NRSA63J-683X	MG RESISTOR	68kΩ,1/16W
R7608	NRSA63J-153X	MG RESISTOR	15kΩ,1/16W
R7609	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W
R7610	NRVA63D-433X	CMF RESISTOR	43kΩ,1/16W
R7611	NRVA63D-821X	CMF RESISTOR	820Ω,1/16W
R7612	NRVA63D-223X	CMF RESISTOR,A	22kΩ,1/16W
	NRVA63D-682X	CMF RESISTOR,B,C,D	6.8kΩ,1/16W
R7613	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W
R7614	NRVA63D-223X	CMF RESISTOR	22kΩ,1/16W
R7615	NRSA63J-223X	MG RESISTOR	22kΩ,1/16W
R7616	NRSA63J-223X	MG RESISTOR	22kΩ,1/16W
R7617	NRSA02J-561X	MG RESISTOR	560Ω,1/10W
R7618	NRSA02J-561X	MG RESISTOR	560Ω,1/10W
R7621	NRSA63J-0R0X	MG RESISTOR,A	0Ω,1/16W
R7622	NRSA63J-223X	MG RESISTOR,B,C,D	22kΩ,1/16W
R7623	NRSA63J-223X	MG RESISTOR,B,C,D	22kΩ,1/16W
R7624	NRVA63D-223X	CMF RESISTOR,B,C,D	22kΩ,1/16W
R7625	NRVA63D-223X	CMF RESISTOR,B,C,D	22kΩ,1/16W
R7626	NRVA63D-183X	CMF RESISTOR,B,D	18kΩ,1/16W
R7627	NRVA63D-334X	CMF RESISTOR,B,D	330kΩ,1/16W
R7628	NRSA63J-224X	MG RESISTOR,B,D	220kΩ,1/16W
R7629	NRSA63J-393X	MG RESISTOR,B,D	39kΩ,1/16W
R7630	NRSA63J-223X	MG RESISTOR	22kΩ,1/16W
R7631	NRSA63J-335X	MG RESISTOR	3.3MΩ,1/16W
R7633	NRSA63J-103X	MG RESISTOR	10kΩ,1/16W
R7640	NRSA63J-0R0X	MG RESISTOR,B,D	0Ω,1/16W
R7641	NRSA63J-0R0X	MG RESISTOR,B,D	0Ω,1/16W
R7642	NRSA63J-0R0X	MG RESISTOR,B,D	0Ω,1/16W
R7643	NRSA63J-0R0X	MG RESISTOR,B,D	0Ω,1/16W
R7644	NRSA63J-0R0X	MG RESISTOR,B,D	0Ω,1/16W
R7645	NRSA63J-0R0X	MG RESISTOR,B,D	0Ω,1/16W
R7646	NRSA63J-0R0X	MG RESISTOR,B,D	0Ω,1/16W
C1	NCB31EK-103X	CAPACITOR	0.01μF,25V
C11	NBE20JM-106X	T CAPACITOR	10μF,6.3V
C7101	NCF31CZ-104X	CAPACITOR,A,B.C	0.1μF,16V
C7102	NCB31HK-103X	CAPACITOR,A,B,C	0.01μF,50V
C7103	NBE20JM-475X	T CAPACITOR,A,C	4.7μF,6.3V
C7601	NCB21CK-105X	CAPACITOR	1μF,16V
C7602	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7603	NCB11CK-225X	CAPACITOR	2.2μF,16V
C7604	NCB11CK-225X	CAPACITOR	2.2μF,16V
C7605	NCB11CK-225X	CAPACITOR	2.2μF,16V
C7606	NCB31CK-104X	CAPACITOR	0.1μF,16V
C7607	NBP41CM-106X	T CAPACITOR	10μF,16V
C7608	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7609	NCB31CK-104X	CAPACITOR	0.1μF,16V
C7610	NCB11CK-225X	CAPACITOR	2.2μF,16V
C7611	NCB11CK-225X	CAPACITOR	2.2μF,16V
C7612	NCB11CK-225X	CAPACITOR	2.2μF,16V
C7613	NCB11CK-225X	CAPACITOR	2.2μF,16V
C7614	NCB31HK-152X	CAPACITOR	0.0015μF,50V
C7615	NCB31EK-103X	CAPACITOR	0.01μF,25V

# ⚠ REF No.	PART No.	PART NAME, DESCRIPTION	
C7616	NCB31HK-102X	CAPACITOR	0.001μF,50V
C7617	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7618	NCB10JK-106X	CAPACITOR	10μF,6.3V
C7619	NCB10JK-106X	CAPACITOR	10μF,6.3V
C7620	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7621	NCB21CK-105X	CAPACITOR	1μF,16V
C7622	NCB21CK-105X	CAPACITOR	1μF,16V
C7623	NBE21AM-106X	T CAPACITOR	10μF,10V
C7624	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7626	NCB31CK-104X	CAPACITOR	0.1μF,16V
C7627	NCF31CZ-104X	CAPACITOR	0.1μF,16V
C7628	NBP41EM-475X	T CAPACITOR	4.7μF,25V
C7629	NBP21CM-335X	T CAPACITOR	3.3μF,16V
C7630	NBP41EM-475X	T CAPACITOR	4.7μF,25V
C7631	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7632	NBP41EM-475X	T CAPACITOR	4.7μF,25V
C7633	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7634	NCB10JK-106X	CAPACITOR	10μF,6.3V
C7635	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7636	NCF31CZ-104X	CAPACITOR,B,C,D	0.1μF,16V
C7637	NCB31EK-103X	CAPACITOR	0.01μF,25V
C7638	NCB21AK-225X	CAPACITOR,B,D	2.2μF,10V
C7639	NBE21AM-106X	T CAPACITOR,B,D	10μF,10V
C7642	NCF31CZ-104X	CAPACITOR	0.1μF,16V
L10	NQR0129-002X	FERRITE BEAD	
L7601	NQL315K-100X	COIL	10μH
L7602	NQL315K-100X	COIL	10μH
L7604	NQL315K-100X	COIL	10μH
L7605	NQL315K-100X	COIL,A	10μH
L7606	NQL315K-100X	COIL,B,C,D	10μH
L7607	NQL315K-100X	COIL	10μH
SW1	NSW0092-001X	SLIDE SWITCH,LIGHT	
SW2	NSW0008-001X	TACT SWITCH,STOP	
SW3	NSW0008-001X	TACT SWITCH,REW	
SW4	NSW0008-001X	TACT SWITCH,FF	
SW5	NSW0008-001X	TACT SWITCH,PLAY/PAUSE	
SW6	NSW0099-001X	SLIDE SWITCH,DSC	
SW7601	NSW0105-001X	DETECT SWITCH,OPEN	
CN761	QGF0508F1-50X	FPC CONNECTOR	
CN763	QGF0507F3-20X	FFC/FPC CONNECTOR	
CN764	QGF0305F1-33X	FPC CONNECTOR	
CN765	QGA1201F2-02X	CONNECTOR	
CN766	NNZ0052-001X	SD CARD CONNECTOR,A	
	NNZ0052-002X	SD CARD CONNECTOR,B,C,D	
⚠ BT1	QAB0025-001	LI BATTERY	
OT1	LY43043-001B	SHIELD SHEET	
OT2	LY43119-001A	SHIELD SHEET,A,C	

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LCD BL BOARD ASSEMBLY <03>

PW2	YB10324A2-02	LCD BL BOARD ASSY,B,C,D
	YB10324B2-02	LCD BL BOARD ASSY,A
IC751	MIP805	IC,B,C,D
Q7501	2SC3647/ST/-X	POW TRANSISTOR
Q7502	2SC3647/ST/-X	POW TRANSISTOR
Q7503	DTA144EE	TRANSISTOR
	or RN2104	TRANSISTOR
	or UN9113J	TRANSISTOR
Q7504	2SC4617/QR/-X	TRANSISTOR

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	D751	1SS376	DIODE,B,C,D	
	R751	NRSA63J-104X	MG RESISTOR,B,C,D	100kΩ,1/16W
	R7501	NRSA63J-102X	MG RESISTOR	1kΩ,1/16W
	R7502	NRSA63J-102X	MG RESISTOR	1kΩ,1/16W
	R7503	NRSA63J-102X	MG RESISTOR	1kΩ,1/16W
	R7506	NRSA63J-473X	MG RESISTOR	47kΩ,1/16W
	R7507	NRSA63J-473X	MG RESISTOR	47kΩ,1/16W
	C751	NBE20JM-106X	T CAPACITOR,B,C,D	10μF,6.3V
	C752	NBE20JM-106X	T CAPACITOR,B,C,D	10μF,6.3V
	C753	NCB31HK-222X	CAPACITOR,B,C,D	0.0022μF,50V
	C754	NCB31HK-222X	CAPACITOR,B,C,D	0.0022μF,50V
	C7501	NCZ1016-120X	CAPACITOR	12pF,2kV
	C7503	NFV41HJ-223X	MPPS CAPACITOR	0.022μF,50V
	C7504	NCB31EK-103X	CAPACITOR	0.01μF,25V
	C7505	NBE20JM-226X	T CAPACITOR	22μF,6.3V
	L751	NQLZ011-681X	COIL,B,C,D	680μH
	L752	NQL315K-100X	COIL,B,C,D	10μH
	L7501	NQLZ010-680X	COIL	68μH
	L7502	NQLZ010-220X	COIL	22μH
	T7501	NQS0048-001X	SW TRANSF	
	CN751	QGF0506F2-32X	FPC CONNECTOR	
	CN752	QGF0505F1-24X	FPC CONNECTOR	
	CN753	QGA5002F1-02X	CONNECTOR	
	CN754	QGF0505F2-06X	FPC CONNECTOR,B,C,D	
⚠	F751	NMFZ007-R20X-K	FUSE,B,C,D	0.2A
⚠	F7501	NMFZ009-R375XJ1	FUSE	0.37A
	OT1	LY41726-001A	PLATE(EARTH)	

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CCD BOARD ASSEMBLY <04>

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	PW	YB10316A-01	CCD BOARD ASSY	
	Q5001	2SC3931/CD/-X	TRANSISTOR	
	R5001	NRSA02J-472X	MG RESISTOR	4.7kΩ,1/10W
	R5002	NRSA02J-0R0X	MG RESISTOR	0Ω,1/10W
	R5003	NRSA02J-104X	MG RESISTOR	100kΩ,1/10W
	R5004	NRS181J-0R0X	MG RESISTOR	0Ω,1/8W
	R5006	NRSA02J-0R0X	MG RESISTOR	0Ω,1/10W
	R5007	NRS181J-0R0X	MG RESISTOR	0Ω,1/8W
	C5001	NCB21CK-104X	CAPACITOR	0.1μF,16V
	C5002	NBP41DM-106X	T CAPACITOR	10μF,20V
	C5003	NCB21CK-104X	CAPACITOR	0.1μF,16V
	C5004	NBE21AM-106X	T CAPACITOR	10μF,10V
	C5005	NCB11EK-104X	CAPACITOR	0.1μF,25V
	C5006	NCB21CK-104X	CAPACITOR	0.1μF,16V
	C5007	NCB21HK-222X	CAPACITOR	0.0022μF,50V
	C5011	NCB21CK-105X	CAPACITOR	1μF,16V
	L5001	NQL315K-100X	COIL	10μH

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JUNCTION BOARD ASSEMBLY <05>

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION
	PW2	YB10314A2-01	JUNCTION BOARD ASSY
	D571	SML-010MT-X	LE DIODE
	SW571	NSW0120-002X	PUSH SWITCH
	CN571	QGF0508F1-34X	FPC CONNECTOR
	CN572	QGF0507F3-15X	FFC/FPC CONNECTOR
	CN573	QGF0505F2-11X	FPC CONNECTOR
	CN574	QGF0505F2-06X	FPC CONNECTOR

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JACK BOARD ASSEMBLY <06>

# ⚠	REF No.	PART No.	PART NAME, DESCRIPTION	
	PW1	YB10314B1-01	JACK BOARD ASSY	
	IC501	BA10358F-XE	IC	
	IC502	RS-171-X	IC(PHOTO SENSOR)	
	Q501	RPM-22PB	PHOTO TRANSISTOR	
	D501	MA8068	ZENER DIODE	
	D502	MA8068	ZENER DIODE	
	D504	MA8068	ZENER DIODE	
	D505	MA8068	ZENER DIODE	
	D506	EMZ6.8N	ZENER DIODE	
	R501	NRSA63J-103X	MG RESISTOR	10kΩ,1/16W
	R502	NRSA63J-684X	MG RESISTOR	680kΩ,1/16W
	R503	NRSA63J-182X	MG RESISTOR	1.8kΩ,1/16W
	R504	NRSA63J-222X	MG RESISTOR	2.2kΩ,1/16W
	R505	NRSA63J-103X	MG RESISTOR	10kΩ,1/16W
	R506	NRSA63J-824X	MG RESISTOR	820kΩ,1/16W
	R507	NRSA63J-104X	MG RESISTOR	100kΩ,1/16W
	R508	NRSA63J-683X	MG RESISTOR	68kΩ,1/16W
	R509	NRSA63J-822X	MG RESISTOR	8.2kΩ,1/16W
	R510	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R511	NRSA63J-302X	MG RESISTOR	3kΩ,1/16W
	R512	NRSA63J-470X	MG RESISTOR	47Ω,1/16W
	R513	NRSA63J-101X	MG RESISTOR	100Ω,1/16W
	R514	NRSA63J-101X	MG RESISTOR	100Ω,1/16W
	R515	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R516	NRSA63J-221X	MG RESISTOR	220Ω,1/16W
	R517	NRSA63J-331X	MG RESISTOR	330Ω,1/16W
	R518	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R521	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R522	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R523	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R524	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R525	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R526	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	R527	NRSA63J-0R0X	MG RESISTOR	0Ω,1/16W
	C501	NBE21AM-335X	T CAPACITOR	3.3μF,10V
	C502	NCF31CZ-104X	CAPACITOR	0.1μF,16V
	C503	NCB31EK-153X	CAPACITOR	0.015μF,25V
	C504	NCB31EK-153X	CAPACITOR	0.015μF,25V
	C506	NBE21AM-106X	T CAPACITOR	10μF,10V
	C509	NBE20JM-226X	T CAPACITOR	22μF,6.3V
	C514	NCB31HK-103X	CAPACITOR	0.01μF,50V
	C515	NCB31HK-103X	CAPACITOR	0.01μF,50V
	L501	NQR0251-004X	FERRITE BEAD	
	L502	NQR0251-004X	FERRITE BEAD	
	L503	NQR0251-004X	FERRITE BEAD	
	TL501	YQ43810-1-1	CONTACT(LIGHT)	
	TL502	YQ43810-1-1	CONTACT(LIGHT)	
	HD1	LY32086-001A	HOLDER(J.PWB)	
	WR1	WJJ0207-002A	E-SI C WIRE C-C,CN501-MAIN	
	J501	QNS0078-001	3.5 JACK	
	J502	PEMC1203	MINI JACK	
	J503	QND0004-001	S JACK	
	J505	QNZ0497-001	USB CONNECTOR	
	CN501	QGA1002F1-09X	CONNECTOR	
	CN502	QGF0507F3-14X	FFC/FPC CONNECTOR	
	OT1	LY30018-023A	SPECIAL SCREW,X4	